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CUSTARDS, ICE CREAMS, CONFECTIONS,
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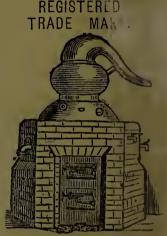
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CHEMISTRY AS APPLIED TO BREAD-MAKING

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Third Edition, Revised and Enlarged



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### PREFACE.

In submitting the following pages for public approval, the Author hopes that the work may prove acceptable and useful to the Baking Trade as a Book of Instruction for Learners, and for daily reference in the Shop and Bakehouse; and having exercised great care in its compilation, he believes that in all its details it will be found a trustworthy guide.

From his own experience in the Baker's business, he is satisfied that a book of this kind, embodying in a handy form the accumulated results of the work of practical men, is really wanted; and as in the choice of Recipes he has been guided by an intimate acquaintance with the requirements of the trade, and as every recipe here given has been tested by actual and successful use, he trusts that the labour which he has bestowed upon the preparation of the work may be rewarded by its wide acceptance by his brethren in the trade.

The work being divided into sections, as shown in the Contents, and a full Index having been added, reference can readily be made, as occasion may arise, either to a class of goods, or to a particular recipe.

Any suggestions for the improvement of the work, which the experience of others may lead them to propose, will, if communicated to the Author, be gratefully esteemed and carefully dealt with in future editions.

SCARBOROUGH,

October, 1888.

#### ADVERTISEMENT TO THE THIRD EDITION.

It is very gratifying to both Author and Publishers that this work has been so favourably received by the Baking Trade and the Public that, two large impressions having now been sold, a new edition is again required.

In the Second Edition, the opportunity was taken to insert some additional recipes for the whole-meal and other breads which are so frequently recommended as substitutes for the white bread in established use, together with some remarks on the subject by Professors Jago and Graham; and the work has now been further enlarged by the insertion of other additional recipes, which it is hoped may render it even more useful and acceptable to its patrons.

December, 1895.

# CONTENTS.

## BREAD AND BISCUIT BAKING, Etc.

T TATE OF TOTAL OIL FORD			P	AGE
I.—INTRODUCTORY CHAPTER.				_
Slow Process in the Art of Bread-making	•	•	•	I
Need of Technical Training	•	•	•	I
Chemistry as applied to Bread making .	•	•	•	2
Process of Fermentation	•	•	•	4
Liebig on the Process of Bread-making.	•	•	•	5
Professors Jago and Graham on Brown Bre	ad.	•	•	7, 8
II.—GENERAL REMARKS ON BAKING.				
Baking and its several Branches				10
Essentials of good Bread-making	·		Ť	IO
German Yeast and Parisian Barm	Ţ			II
Recipe for American Patent Yeast				12
Judging between good and bad Flour .				13
Liebig on the Action of Alum in Bread .	·			13
Importance of good Butter to the Pastrycoo	ok .	·		14
Precautions necessary in the Mixing of Cake		Biscu	iits	14
· ·				
III.—BREAD, TEA CAKES, BUNS, Etc.				
I. To make Home-made Bread	•	•	•	17
2. Bread-making by the Old Method .	•		•	17
3. Modern Way of making Bread	•	•	•	18
4. Scotch Style of making Bread	•	•	•	19
5. Home-made Whole Meal Bread	•	•		20
6. Whole Meal Bread for Master Bakers.	•	•		2 I
7. Unfermented or Diet Bread	•	•	•	2 I
8. Rye Bread	•			22
9. Coarse Bread	•	•		22
Io. Germ Flour Bread	•	•		23
II. Tea Cakes	•	•	•	24
12. Queen's Bread	•	•	•	24
13. Sally Luns, Yorkshire, or Tea Cakes.	•			24
14. Muffins	•	•		25
15. Another Way				25

TITRRE	AD, TEA CA	243	RIIN	JC	ETC	Con	tinned	1	P.	AGB
		12.12.09	101	10,	1510.	(0010	i i i i i i i i i i	<i></i>		26
	Crumpets . Oatmeal Cake	•	•	•	•	•	•	•	•	
•	Bath Buns.	•	•	•	•	•	•	•	•	27
		•	•	•	•	•	•	•	•	27
19.	Hot Cross Buns		•	•	•	•	•	•	•	27 28
	Chelsea Buns	•	•	•	•	•	•	•	•	28
	Balmoral Cakes	•	•	•	•	•	•	•	•	
	Balloon or Prus		11200	•	•	•	•	•	•	29
	Saffron Buns		ancs	•	•	•	•	•		29
•	Cinnamon Buns	•	•	•	•	•	•	•	•	29
•	Jubilee Buns	•	•	•	•	•	•	•	•	30
	German Buns	_•	•	•	•	•	•	•	•	30
1 -	Common Germa		ne /for	· wh	olegal	• e nur	nnses)	•	•	30
	London Buns	an Dur.	is (ioi	44.11	oicsai	c pur	poscsy	•	•	30
_	Penny Queen C	• olzec	•	•	•	•	•	•	•	30
_	Patent Flour		•	•	•	•	•	•	•	31
	Penny Rice Cal		•	•	•	•	•	•	•	31
	Cocoanut Cakes		•	•	•	•	•	•	•	31
~ ~	Albert Cakes	•	•	•	•	•	•		•	31
34•	Mibert Cakes	•		•	•	•	•	•	•	31
TV CINC	ו תואשמממים	D A TD T2	TNC	.0	TOUS	י מידי כ	O TE' A T	) Tra		
	GERBREAD, 1			٠, ·	SUOI	(TD1	XEA1	), E1	C.	20
	Queen's Ginger		•	•	•	•	•	•	•	32
	German Ginger			•	•	•	•	•	•	32
	Spiced Gingerb				whole		· nurno		•	32
	Scarborough G Ginger Cakes			, IOI	WHOIC	esale	purpos	(63)	•	33
			•	•	•	•	•	•	•	33
	Prepared Treas		• This	• • Gi	n aarbi	· ·	•	•		33
•	Prepared Tread			C G1.	ngerbi	reau	•	•	•	33
	Laughing or F			ebreo.	٠.	•	•	•	•	34
	Grantham or W	inte c	mge	DIE	au	•	•	•	•	34
• •	Spice Nuts .  Another Wa	•	•	•	•	•	•	•	. •	34
45.		•	•	•	•	•	•	•	•	34
46.			•	•		•	•	•	•	34
	Light Gingerbi Italian Jumbles		• randr	Sn	•	•	•	•	•	34
	Halfpenny Gin	•	•		-	•	•	•	•	35
	Hunting Nuts	gerbrea	au sy	uare	28 .	•	•	•	•	35
	Davisia as	•	•	•	•	•	•	•	•	36
•	_	•	•	•	•	•	•	•	•	36
5 <sup>2</sup> .	Another Wa Parking Cake	y •	•	•	•	•	•	•	•	36
	Scotch Shortb	· b.ca	•	•	•	•	•	•	•	36
			•	•	•	•	•	•	•	36
	English Shorth French Shorth		•	•	•	•	•	•	•	37
			t c	•	•	•	•	•	•	37
57•	Machine-made	Discui	LS	•	•	•	•	•	•	<b>3</b> 8

	CONT	EN7	rs.					vii
<b>47 3</b> 7 A 7	D DISCILLAGE							PAGE
	RD BISCUITS.							28
		•		•	•	•	•	38
~ ~					•		•	39
	Thick Captains .							39
	Abernethy Biscuits (D					_	pe) .	39
	Abernethys as made in				• •		•	40
	Usual Way of making				uits ,	•	•	40
	Wine Biscuits .			•	•	•	•	40
	Soda Biscuits .			•	•	•	•	40
	Boston Lemon Cracke				•	•		41
	Pic-Nics ,		•		•	•	•	41
	Common Pic-Nics		•		•	•	•	4 I
	Luncheon Biscuits	•	•	•	•	•		4 I
	Digestive Biscuits			•	•	•		41
71.	•	•		•	•	•	•	42
•	Small Arrowroot Bisc	uits	•	•	•	•	•	42
	Coffee Biscuits .			•	•	•	•	42
	Victoria Biscuits.	•	•	•	•	•	•	42
			•		•		•	43
	York Biscuits .	•	•	•	•	•	•	43
• •	Machine Biscuits	•	•	•	•	•	•	43
	Bath Oliver Biscuits	•	•	•	•	•	•	43
	Edinburgh Biscuits	•	•	•	•	•	•	43
	Nursery Biscuits.	•	•	•	•			44
8r.	Soda Biscuits .	•	•	•	•	•		. 44
			~~ ~					
	CY BISCUITS, ALI	MON	DS,	ETC.				
	Digestive Biscuits	•	•	•	•	• •	•	45
_	Kent Biscuits .	•	•	•	•	•	•	45
•	Imperial or Lemon Bi	scuits	•	•	•	• •	•	45
•	Venice Biscuits .	•	•	•	•	•	•	. 46
	Shrewsbury Biscuits	•	•	•	•	•		. 46
87.	-	•	•	•	•	•		46
88.	•	•	•	•	•	•		46
89.	Peruvian Biscuits	•	•	•	•	• •	1.	47
90.	Currant Fruit Biscuits	•	•	•	•	•		. 47
91.	Snowdrop Biscuits		•	•	•	•	,	. 47
92.	Rice Biscuits .		•		•			47
93.	Genoa and Toulouse	Bisc	cuits,	Exhi	bition	Nuts	, and	ĺ
	Marseillaise Biscuit	s	•	•	•			. 47
94.	Walnut Biscuits .	•	•	•	•	•	,	. 48
95.	Queen's Drops .	•	•	•	•	•		. 48
96.	Cracknel Biscuits		•	•	•			48
97.	Premium Drops .	•	•	•		•		49
* *	German Wafers .		•		•			40

VI.—FANCY BISCUITS, ALMONDS,	Temo	1000	atima	.71	Ρ.	AGE
		(00)	illille	:u ) —		40
99. Crimp, or Honeycomb Biscui	ıs	•	•	•	•	49
	•	•	•	•	•	50
tot. Italian Macaroons	•	•	•	•		50
102. Common Macaroons .	•	•	•	•		50
103. French Macaroons	•	•	•	•		51
104. Ratafias	•	•	•	•		51
105. Princess Biscuits	•	•	•	•		51
106. Rusks	•	•	•	•		51
107. Rock Almonds (White) .	•	•	•	•	•	52
108. Rock Almonds (Pink) .	•	•	•	•		52
109. Rock Almonds (Brown).	•	•	•	•	•	52
110. Almond Fruit Biscuits .	•	•	•	•	•	52
, III. Meringues	•	•	•	•	•	53
112. Another Way	•	•	•	•		53
113. Common Drop Biscuits .	•	•	•	•		54
114. Savoy Biscuits	•	•	•			54
115. French Savoy Biscuits .	•	•		•		54
116. Judges' Biscuits			•	•		54
117. Lord Mayor's Biscuits .						54
118. Fruit Biscuits						54
- D1'D 1D''	•					55
120. Rice Biscuits						55
121. Scarborough Water Cakes				Ĭ		56
122. Sponge Biscuits	į					56
1.23. Almond Sponge Biscuits.	•	•				56
124. Naples Biscuits	•	•		•		56
124. Napies Discuits	•			•	•	50
VII.—PASTRY, CUSTARDS, Etc.						
125. Butter for Puff Paste .						57
126. Puff Paste						57
127. Another Way		Ů	Ţ			57
	•	•	•	•		58
129. Sweet Tart Paste	•	•	•	•		
130. Paste for a Baked Custard	•	•	•	•	•	58 58
131. Paste for small Raised Pies		•	•	•		58 58
131. To make a handsome Tartlet		•	•	•		58 58
132. Nelson Cake or Eccles Cake		•	•	•		58 58
134. To make a Custard	•	•	•	•		58
	•	•	•	•		59
135. Common Custard	•	•	•	•	•	59
VIIIFRUIT CAKES, BRIDE CAK	ES. F	Етс				
136. Directions for mixing Cakes in			Buffe	er .		60
137. Another Way						6 <b>o</b>
138. London Way of mixing Cake						60
J						

WIII EDILLE CAREE DRIDE CAREE Reg / www.	- 21	PAGE
VIII.—FRUIT CAKES, BRIDE CAKES, ETC. (continu	ea )—	
139. Another Way of mixing Cakes	•	61
140. Citron Cake	•	61
141. Common Fruit Cake	•	16
142. Pound Cakes	•	61
143. Seed Cakes	•	61
144. Two and Three Pound Cakes	•	62
145. Another Seed Cake	•	62
146. Four and Six Pound Cakes	•	62
147. Bride Cakes	•	62
148. Icing Sugar for Bride Cakes, &c	•	63
149. Almond Icing for Bride Cakes		63
150. Wedding Cake		63
151. Rich Twelfth Cake		64
152. Madeira Cakes		64
153. Plum Cake (as made for the best shops in Edinb	urgh)	
154. Genoa Cake		64
155. Rice Cake (Scotch Mixture)		64
156. Madeira Cake (Scotch Mixture)		64
157. Pond Cake or Dundee Cake		65
158. Silver Cake		65
159. Gold Cake	·	65
160. Plum Cake at 6d. per lb. (as so'd by Grocers)	·	65
161. Another Way	•	65
162. Another Way		_
163. Mystery, or Cheap Plum Cake at 3d. per lb.		65 66
164. Plum Cake at 4d. per lb.	•	66
· · · · · · · · · · · · · · · · · · ·	•	
165. Lafayette Cakes	•	66
166. American Genoa Cake	•	66
167. Lemon Cake	•	. 67
168. Bristol Cake	•	. 67
169. Jubilee Cakes	•	. 67
IX.—HANDY WHOLESALE RECIPES FOR SM	ALL	,
MASTERS.		
- 170. Soda Cakes or Scones	, ,	. 68
171. Currant or Milk Scones	,	. 68
172. Sugar or White Spice Biscuits		. 68
173. Halfpenny Scotch Cakes		, 69
174. Large Square Penny Albert Cake		69
175. Brandy Snaps		, 69
176. Nonpareil Biscuits		69
177. Common Halfpenny Queen Cake		, 70
178. Halfpenny Lunch Cake		, 7g
179. Polkas or Halfpenny Sponges		70
13. g amme of trumbetting obouges 1	•	10

IXA.—ADDITIONAL R	ECIPES							
							I	PAGE
179a. Maria Biscuit	.S .	•	•	•	•	•	•	7 I
179b. Osborne Biscu	uits .	•	•	•	•	•		71
179c. Balmoral Bisc	cuits .	•	•		•	•		71
179d. Social Biscuit	ts .	•	•					71
179e. Ginger Genoa	Cake	•	•					71
179f. Halfpenny an	d Penny	Spong	ge Ca	kes				72
179g. Scotch Perkin	ns .	•	•	•				73
179h. Small Huntin								73
179i. Slab Gingerb	~							74
179k. Cassell Puddi		Ž		Ţ				
1791. Hovis Biscuit		•	•	•		•	•	74
1/90. HOVE DISCUIT	.S	•	•	•	•	•	•	74

## SUGAR-BOILING, ETC.

#### X.—CONFECTIONS IN SUGAR-BOILING.

180.	Clarifying Sug	gar	•	•	•	•	•	•	•	77
181.	Testing Sugar	•	•	•	•	•	•	•	•	78
182.	To boil Sugar	to	the	degree	called	"Pe	arled	"	•	78
183.	To boil Sugar	to	the	degree	called	"Bl	own ''		•	78
184.	To boil Sugar	to	the	degree	called	"Fe	athere	ed"	•	78
185.	To boil Sugar	to	the	"Ball	" Degr	ree		•	•	78
186.	To boil Sugar	to	the	degree	called	"Cr	ackled	"	•	79
187.	To boil Sugar	to	the	degree	called	"Ca	ramel	led"	•	79
188.	To boil Sugar	by	the	Therm	ometer	r .	•	•	•	79
	Barley Sugar	•		•	•	•	•	•	•	79
190.	Barley Sugar	Dro	ps.	•	•	•	•			80
	Acid Drops		•	•	•	•	•		•	80
192.	Pine-apple Dre	ops		•	•	•	•		•	80
	Poppy Drops	-	•	•	•	•	•	•	•	80
194.	Ginger Drops		•	•	•	•	•	•	•	81
	Cayenne Drop		•	•	•	•	•	•	•	81
	Ginger Candy		•	•		•	•	•	•	81
	Lemon Candy		•	•	•	•	•	•	•	81
198.	Peppermint Ca	ind	у .	•	•	•	•	•	•	81
-	Rose Candy	•	•	•	•	•	•	•	•	81
	Burnt Almond			•		•	•	•	•	82
	Cast Sugar Dr				•	•	•			82

X.—CONFE	CTIONS IN SUGA	R-B	OILI	NG	(contr	nued)	_	P	AGE
202.	Rose Drops .		•	•	•	•	•		83
203.	Orange-flower Drops	;	•	•	•	•	•		83
204.	Chocolate Drops			•	•	•	•		83
205.	Coffee Drops .	•	•	•	•	•	•		83
<b>2</b> 06.	Barberry Drops	•	•	•	•	•	•	•	83
207.	Peppermint Drops	•	•	•	•	•	•		84
	Pine-apple Drops	•	•	•	•	•	•	•	84
209.	Vanilla Drops .	•	•	•	•	•	•	•	84
210.	Ginger Drops .	•	•	•	•	•	•		84
211.	Lemon Drops .	•	•	•	•	•	•	•	84
212.	Orange Drops .	•	•	•	•	•	•	•	85
213.	Pear Drops .	•	•			•	•	•	85
214.	Lavender, Violet, M	usk, a	nd M	Iillefl	eur D	rops	•	•	85
215.	Pink Burnt Almonds	5	•	•	•		•		85
216.	Philadelphia Carame	ls	•	•	•	•	•		85
217.	Boston Chips .		•	•	•	•	•		86
218.	Engagement Favour	S	•	•	•	•	•		86
219.	Almond Hardbake	•	•	•	•	•		•	86
220.	To make Gum Paste	•	•	•	•	•	•	•	87
221.	To spin a Silver We	b	•	•	•	•	•	•	87
222.	To spin a Gold Web		•	•	•	•	•	•	87
223.	A Spun Sugar Pyran	nid	•	•	•	•	•		88
224.	To spin a Gold Suga	ir Cro	cantl	ı	•	•	•	•	88
225.	To spin a Gold Cup		•	•	•	•	•	•	88
226.	A Spun Sugar Bee-	hive	•	•	•	•	•	•	89
227.	To ornament a Bee-	hive	•	•	•	•	•	•	89
XI.—COLO	URING SUGAR.								
228.	To prepare Sugar for	r Colo	uring	7	•		•		91
	To colour Sugar	•	•	•	•	•	•	• >	91
	Blue Colouring	•	•		•	•	•		91
	Carmine Colouring	•	•		•				92
•	Green Colouring	•		•		•			92
233.		•	•		•	•			92
	Orange Colouring	•	•		•				92
<b>U</b> 1	Red Colouring	•		•	•	•			93
	Yellow Colouring	•				•			93
XII.—LOZE				Ť					
		200					,		
	Peppermint Lozenge Rose Lozenges	.5	•	•	•	•	•	•	94
•	Ginger Lozenges	•	•	•	•	•	•	•	94
•	_	07000	•	•	•	•	•	•	95
245	. Transparent Mint L	oreng	CS	•	•	•	•	•	95

#### CONTENTS.

X11.—L0	OZEN	NGES (continued)—							P	AGB
	241.	Cinnamon Lozenges								95
	242.	Clove Lozenges	•	•						95
	243.	Nutmeg Lozenges	•	•	•					95
		Lavender Lozenges	•	•	•	•	•		•	95
	<b>2</b> 45.	Vanilla Lozenges	•	•	•					95
	246.	Brilliants .	•	•	•	•	•		•	95
XIII.—I	CE (	CREAMS.								
	247.	Vanilla Ice Cream	•	•	•					96
	248.	Bisque or Biscuit Gl	ace	•				•		97
	<b>2</b> 49.	Crushed Strawberry	Ice (	Cream						97
		Hokey Pokey .								
•		Cocoanut Ice .				•				98
XIV.—F	PRES	SERVING FRUITS	S.							
	252.	Large Strawberries	•			•				99
	253.	Strawberry Jam	•							
	<b>2</b> 54.	Raspberry Jelly	•							
		Black Currant Jelly		•	•	•				101
	256.	Red Currant Jam	•	•	•	•				101
	257.	Apple Jelly .	•	•	•		•		•	101
		Gooseberry Jam	•	•	•	•	•			102
	259.	Orange Marmalade	•	•	•	•	•	•	•	102
XVC	HOC	COLATE.								
	260.	General Directions	for M	aking	Cho	colate	•			103
	261.	Chocolate Harlequin	n Pist	achio	S					104
		Chocolate Drops wi								104
		Chocolate in Mould		_		•		•		104
TNDEX										TOP

# THE BREAD AND BISCUIT BAKER'S ASSISTANT.

#### I. INTRODUCTORY CHAPTER.

When we reflect upon the present conditions under which the bread-making industry is carried on in most of the large cities and towns of England, Scotland, and Ireland, and remember the importance of that industry to mankind, we cannot but be impressed by the little progress that has been made in the art of bread-making. Whilst other industries have been marked by important improvements, we find bread being made in much the same manner as it was five hundred years ago. The mystery is how—by accident, it would seem—we get such well-made bread as we do. There are very few even now who have the slightest conception of what yeast really is, and fewer still who know how or why it makes bread light. But it will surprise me if the trade does not undergo, in the course of the next ten years, a complete and beneficial change.

Master bakers and confectioners are everywhere complaining of the incompetency of their workmen; and it cannot be denied that there is some ground for the complaint. Proper training in the baking and confectionery trade is of great importance. A trained servant gives satisfaction to his employer, and receives a responsive good feeling in return.

Let us see what is meant by "training." In its broadest and best sense, it is knowing what to do, and when and how to do it.

Take the first condition—What to do. This may be considered on two grounds, generally known as the practical and the theoretical, though the latter is sometimes confounded with the scientific, and people are led to sneer at science. Much has been said lately in our trade journals about introducing scientific chemistry to the journeyman baker in connection with his daily work of making bread. But how many journeyman bakers could we find that even understand the meaning of the word chemistry, without expecting them to understand mysteries to which years of study have been devoted by such men as Liebig, Graham, Dumas, Darwin, Pasteur, and Thoms of Alyth?

#### CHEMISTRY AS APPLIED TO BREAD-MAKING.

It is not my intention to depreciate the great good that would be derived from scientific chemistry if properly applied to bread-making. But who is to study and apply it? Surely not a man who earns from 20s. to 30s. per week, and works twelve, fourteen, and sixteen hours a day in an overheated atmosphere. What hours of rest he has should be used to recuperate his lost vitality. Not till scientific chemistry is taught in our Board schools and made one of the elements of a scholar's ordinary education, can we hope to see it used successfully with bakers in making bread.

Chemistry, I believe, is destined to play as important a part in the annals of the baking trade as did the substitution of machinery for hand labour. But at the present day how many bakers know that the decomposition of sugar produces fermentation; that fermentation destroys sugar and produces alcohol; that maltose assists fermentation; that starch, however obtained, has always the same characteristics, though there are different

kinds from different sources; that dextrine is soluble in water and insoluble in alcohol; that protoplasm, the basis of all life, consists of proteine, compounds, mineral salts, nitrogen, &c.? And do not the meaning and use of terms familiar in scientific chemistry—such as diastase, cerealin, gluten, and others—only perplex the ordinary journeyman baker, and make him think that the less he has to do with science, the more easily he will get his life "rubbed through." It is impossible for working bakers to become acquainted with these things while in the bakehouse; and while there are in many towns such valuable institutions as free libraries, mechanics' institutes, &c., they are not available to the ordinary baker, as his hours are so exceptional. The baker's hours of labour, indeed, are shorter in many places than they used to be, and he is no longer called "the white slave." Still, the spirit of competition is so strong that a baker has to work much harder proportionally than other working men, and his mind is in no condition, in the little spare time he has, to study the problems of science; and nobody can expect the baker to know, as it were by intuition, the whys and the wherefores of chemistry. However, what he has learnt in the practice of his art, and what the common custom of the trade has handed down to him, he may use to more or less advantage, according as he has more or less per-In the case of fermentation, which may be sonal skill. described as the very backbone of bread-making, a baker will find plenty to study and to think about, from his first "setting the sponge" until his bread is out of the oven, without perplexing himself over problems about which he can understand little or nothing.

With time and money at his disposal, however, the study of chemistry opens up a wide field to the studious baker, and would no doubt reward him for his pains, and at the same time prove a great gain to his trade; and I believe there are

not a few earnest workers labouring at the present time to afford that knowledge and help to the journeyman baker which will eventually lead to an easier way of earning his daily bread.

#### FERMENTATION.

The process of fermentation, which has for its object either the manufacture of bread, or of an alcoholic product in a more or less concentrated form, is very similar in action during its earlier stages. It commences with the growth and multiplication of the fermenting germs contained in the minute organisms floating in the air, the inorganic constituents of the water, and the protoplasm (essence of life) of the yeast; and all the changes brought about are accompanied by heat. Fermentation is caused by the decomposition of the starch and gluten of a solution of either potatoes, flour, or malted barley, which decomposition is accompanied by an evolution of gas. There is also a peculiar vibration given to the various bodies in contact, which agitates the whole. This agitation is increased by the bursting of the starch-cells and the formation therefrom of maltose, and also by the changing of the maltose sugar into carbonic acid gas. Substances in a state of decomposition are capable of bringing about a change in the chemical composition of bodies with which they are in contact. Most of the vegetable substances used in fermentation have a constituent part—sugar, starch, or some other substance—which is easily converted into a fermentable sugar by the action of yeast, or of diluted mineral acids, or by a constituent of malted barley, called diastase. The sugar produced by these means is resolved into carbonic acid gas and alcohol by vinous fermentation. It will be seen, therefore, that fermentation is started by the saccharine element in the ferment, which is termed maltose; the process is then kept up by the gluten, which, becoming decomposed, aids the sugar and starch in the work of providing food for the yeast as soon as the latter is brought in contact with it. The fermentation then takes place very rapidly, and carbonic acid gas is generated and given off in proportion to the amount of the products contained in the ferment, or sponge, and also to the strength and freshness of the yeast: especially is this so with gluten, which is the great agent of fermentation, when in a state of decomposition and when in contact with yeast.

#### PROCESS OF BREAD-MAKING.

It will be useful to give here some remarks by the great scientist, Liebig, on the best process of making bread:—

"Many chemists are of opinion that flour by the fermentation in the dough loses somewhat of its nutritious constituents, from a decomposition of the gluten; and it has been proposed to render the dough porous without fermentation by means of substances which when brought into contact yield carbonic acid. But on a closer investigation of the process this view appears to have little foundation.

"When flour is made into dough with water, and allowed to stand at a gentle warmth, a change takes place in the gluten of the dough, similar to that which occurs after the steeping of barley in the commencement of germination in the seeds in the preparation of malt; and in consequence of this change the starch (the greater part of it in malting; in dough only a small percentage) is converted into sugar, a small portion of the gluten passes into the soluble state, in which it acquires the properties of albumen, but by this change it loses nothing whatever of its digestibility or of its nutritive value.

"We cannot bring flour and water together without the formation of sugar from the starch, and it is this sugar and not the gluten of which a part enters into fermentation, and is resolved into alcohol and carbonic acid.

"We know that malt is not inferior in nutritive power to barley from which it is derived, although the gluten contained in it has undergone a much more profound alteration than that of flour in the dough, and experience has taught us that in distilleries where spirits are made from potatoes, the plastic constituents of the potatoes, and of the malt which is added after having gone through the entire course of the processes of the formation and the fermentation of the sugar, have lost little or nothing of their nutritive value. It is certain, therefore, that in the making of bread there is no loss of gluten.

"Only a small part of the starch of the flour is consumed in the production of sugar, and the fermentative process is not only the simplest and best but also the cheapest of all the methods which have been recommended for rendering bread porous. Besides, chemical preparations ought never, as a rule, to be recommended by chemists for culinary purposes, since they hardly ever are found pure in ordinary commerce. For example, the commercial crude muriatic acid which it is recommended to add to the dough along with bicarbonate of soda, is always most impure, and often contains arsenic, so that the chemist never uses it without a tedious process of purification for his purposes, which are of far less importance than making bread light and porous.

"To make bread cheaper it has been proposed to add to dough potato starch or dextrine, rice, the pressed pulp of turnips, pressed raw potatoes, or boiled potatoes; but all these additions only diminish the nutritive value of bread. Potato starch, dextrine, or the pressed pulp of turnips, and beet-root, when added to flour, yield a mixture the nutritive value of which is equal to the entire potato, or lower still, but no one can consider the change of grain or flour into a food of equal value with potatoes or rice an improvement. The true problem is to render the potatoes or rice similar or equal to wheat in their

effects, and not vice versâ. It is better under all circumstances to boil the potatoes and eat them as such, than to add potatoes or potato starch to flour before it is made into bread, which should be strictly prohibited by police regulation on account of the cheating to which it would inevitably give rise."

#### Brown Bread.

With regard to the nutritive qualities of brown bread, Professor Jago (who I think one of our highest authorities) says that whole meal, and flour from which the bran and germ have not been removed, do not keep well. These bodies contain oil and nitrogenous principles which readily decompose, producing rancidity and mustiness in flavour. Not only do these changes occur in the flour, but they also proceed apace in the dough. The diastastic bodies of the bran and germ attack the starch, and more or less convert it into dextrine and maltose; they further attack the gluten, and that remarkably elastic body which confers on wheaten flour, alone of all the cereals, the power of forming a light, spongy, well-risen loaf. The gluten, under the action of the bran and germ, loses its elasticity, and becomes fragile and incapable of retaining the gas produced during fermentation; the result is heavy, sodden, indigestible bread.

Evidence of this is found in the fact that while whole-meal loaves are so excessively baked as to produce a crust two or three times the ordinary thickness, the interior is still in a damp and sodden condition. This is the effect of bran in whole-meal.

"Not only, then, on the ground of nutritive value may the use of a pure white loaf be urged, but such bread is more healthily made, and will be sweet and free from acidity when whole-meal and dark breads are sour and unwholesome. It has also been pointed out that the nutritive constituents of the bran are so

locked within it that they escape unaltered from the human body."

Such, in brief, is Professor Jago's opinion of whole-meal, and bread made from it. My own opinion is that Darwin's theory of the survival of the fittest is very forcibly illustrated in the milling of cereals, and the adoption of food most proper for the human system. We have had brown bread and white bread before the public from time immemorial, and what is the result? Why, for every sack of wheat-meal bread which is baked we have a thousand sacks of fine or white bread. And what of our hospitals and our army and navy, with medical men at the head of them, watching the results of this food or that food, and its effects on the human body? I admit that brown bread does suit some constitutions; but to the majority of people it is nauseous, frequently causing flatulency. I will just quote another good authority—Professor Charles Graham.

In his lecture upon "The Chemistry of Bread-Making," delivered before the Society of Arts in December, 1879, he said: "As regards the importance of the constituents of bran, I say that the analyst, and the physician who makes use of the analyst as his supporter, in bringing before us the importance of brown bread as compared with white, and who assert that in rejecting the bran we are guilty of a serious waste of fleshforming and bone-forming material, should not take a mere chemical analysis as all-sufficient to establish their point. A table showing, from an analyst's point of view, the comparative merits of various substances for feeding purposes, shows hay to be of high value as a food, and even oat straw—as, indeed, every farmer knows from experience. Still more valuable for their heat-giving, and especially for their flesh-forming, materials, are linseed-cake, rape-cake, and decorticated cotton-cake. Now those who hold, from mere chemical analysis, that bran is of such high value as a food material that its omission from flour

would meet with grave censure, should, from a similar analytical standpoint, urge us to eat hay, oat-straw, linseed and cotton cakes. Doubtless these substances are of high value as food for cattle, because the herbivorous oxen can digest and utilise them with ease; not so with man, who would starve in a field where a cow or a sheep would fatten. As with hay or linseed cake, so with bran; I hold that the best mode of digesting such food substances is first of all by the aid of our hoofed friends, to convert them into milk or cream, or bacon, beef, or mutton."

Now these are the scientific opinions of two of our very highest authorities. But of late I have been making brown bread out of a blend of cereals made and milled by an enterprising firm of millers in the North of England, and I must really say that it meets a long-felt want, as it produces a brown loaf which is free from that nauseous taste of which complaint is so often made with brown bread, and has a good nutty flavour of its own.

In conclusion, let me say that we have reason for great hope for the future of the Bread and Confectionery trade. Many earnest minds are devoting both time and money to the development of this important industry, and their efforts cannot fail to result in bettering the knowledge and lightening the labour of the practical baker.

#### II. GENERAL REMARKS ON BAKING.

Baking as a business or profession has never been confined to the making of bread alone—that is to say, bread in everyday use. A baker we take to mean a person who bakes and prepares any farinaceous substance intended for human food. Therefore baking not only includes loaf-bread baking, biscuit baking, fancy-bread baking, but also pastry-making and confectionery. It is common for all these branches to be practised by the same person, and it is therefore fitting that they should all be treated of in a work of this kind. This we intend doing under separate heads.

#### ESSENTIALS OF GOOD BREAD-MAKING.

Two of the most essential things in bread-baking, in order to produce a full-flavoured, showy, and sweet loaf, are good yeast and good flour. A good oven is also necessary. An oven which is either too hot or too cold will spoil what would otherwise be a good batch of bread: so great care should be used in order to have the oven of the proper heat. Pan bread, or bread baked in tins, need a greater heat than batch bread, as pan-bread dough is of a lighter nature than batch-bread dough, and consequently requires more heat to keep it up. I do not intend, however, going into the merits of different ovens, as I am not competent to do so. There are so many different kinds, and each baker, as a rule, seems to fancy what he has been most used to. For heating purposes, cinders have taken the place of coals and wood, and (I think) to the

advantage of both master and journeyman. Cinders are cheaper for the master and cleaner for the workman.

#### GERMAN YEAST AND PARISIAN BARM.

Yeasts, or barms, are of many varieties, but I purpose here to deal with only two kinds—that commonly known as German yeast, which is mostly used in England, and Parisian barm, the kind most in use in Scotland.

A great point in working German yeast is to know when it is in proper condition, as it is very liable to go bad in very warm weather, or if kept in a very warm place. Care should be taken to keep it in a place as near a temperature of 56° to 60° Fahr. as possible. Should there be any suspicion that the yeast is not up to the mark, a simple and sure test is to get a clean cup or tumbler, half fill it with warm water of a temperature of 100°, put an ounce of loaf sugar in the water, and when dissolved add one ounce of yeast. The yeast will, of course, sink to the bottom, but if it is sound and in good condition it will rise to the top in two minutes. Should it take much longer than that, the less you have to do with it the better.

Parisian barm makes a nice showy loaf, but for flavour I prefer German yeast. To make Parisian barm I gallon of water is put into a pan at, say, 140° Fahr.; weigh 2 lbs. of crushed malt, put it into the water at the above temperature, cover it up for about three hours; one hour before you are going to make your barm, that is two hours since you put your malt to steep, put 3 gallons of water into a large pan, put it on the fire; when it boils, add 2 oz. of good fresh hops, well boil for twenty minutes; after which well strain the malt through a hair sieve. Put it into the barm tub and add as much flour as can be nicely stirred in with the barm-stick. Then put the boiling hop-water through a sieve on top of the malt water and flour and well stir it. It should be properly scalded. Some

put the hops in a small linen bag made for the purpose and put it in the boiling water, squeezing it against the side of the pot before taking it out. Supposing it to be five o'clock in the afternoon, it may be put by with a couple of sacks over it till five o'clock next morning. Then "set the barm away" (as they say in Scotland), by adding to the above liquid half a gallon of the barm previously made.

After the old barm is added to the new, in a few hours a scum gathers on the top. This scum will either start at the side of the tub and work gradually to the other side, or I have seen it start in the middle and work itself slowly to the sides of the tub. When ready it should have a nice clear bell top. It takes from ten to twelve hours to work before it is ready.

By following this method one may always have good barm. Cleanliness is very essential for barm, and care should be taken that neither grease nor churned milk shall get near it. We need scarcely say that experience is required in this as in other things.

#### AMERICAN PATENT YEAST.

I may add the following recipe for American patent yeast:—
Take half a pound of hops and two pailfuls of water; mix and boil them till the liquid is reduced one half; strain the decoction into a tub, and when luke-warm add half a peck of malt. In the meantime, put the strained-off hops again into two pailfuls of water, and boil as before till they are reduced one half; strain the liquid while hot into a tub. (The heat will not injuriously affect malt previously mixed with tepid water.) When the liquid has cooled down to about blood heat, strain off the malt and add to the liquor two quarts of patent yeast set apart from the previous making by the above process. Five gallons of good yeast may thus be made which will be ready for use the day after it is made. It takes about

eight hours' time to manufacture, but gives very little trouble to the baker.

#### GOOD OR BAD FLOUR.

Experience is also necessary to judge of flour; but any one in the habit of using flour may form a pretty accurate idea whether it is good or bad. If fine and white, it may be considered good so far as colour is concerned; but if it be brown, it shows that it was either made from inferior wheat, or has been coarsely dressed—that is, that it contains particles of bran. However, brown flour may be of a good sound quality, and fine white flour may not.

To judge of flour, take a portion in your hand and press it firmly between the thumb and forefinger, at the same time rubbing it gently for the purpose of making a level surface upon the flour; or take a watch with a smooth back and press it firmly on the flour. By this means its colour may be ascertained by observing the pressed or smooth surface. If the flour feels loose and lively in the hand, it is of good quality; if it feels dead or damp, or, in other words, clammy, it is decidedly bad. Flour ought to be a week or two old before being used.

#### ALUM IN BREAD.

A common custom to improve flour was to add a small quantity of alum to a sack of flour—a custom which, it may be hoped, is entirely a thing of the past. According to Liebig, the action of alum in the process of bread-making is to form certain insoluble combinations which render digestion difficult, and detract largely from the value of bread as food. Professor Vaughan, of the University of Michigan, says: "The use of alum is an adulteration which is injurious to health. It unites with the phosphates in the bread, rendering them insoluble, and preventing their digestion and absorption. In this way,

alum, when present, diminishes the nutritive value of bread. While some gain may perhaps temporarily accrue to the manufacturer through the covert perpetration of this fraud, still no good to any one can result therefrom."

#### BUTTER FOR PASTRY AND CAKES.

Butter, which so largely enters into the pastrycook's business, is another important point for consideration. It should be perfectly sweet, and before it is used made smooth on a marble slab. Salt butter made from cows fed on poor pasture is the best for puff paste, and is the most proper for ornamental work; it should be washed in water two or three times before being used. On the other hand, for every kind of cake the butter cannot be too rich.

# PRECAUTIONS NECESSARY IN THE MIXING OF CAKES AND BISCUITS.

In mixing cakes and biscuits, care should be used to ascertain not only that the prescribed quantity, but also that the proper quality of flour, as given in each recipe, is used, as otherwise the results will sometimes be unsatisfactory. (I do not in the following remarks allude to hard or machine-made biscuits, as a special blend of good softish flours is requisite to produce the nice mellow appearance that a good modern machine-made biscuit should possess, if it is to keep its present high market standard. My remarks refer especially to soft or fancy biscuits, as well as to all kinds of both best and common cakes.)

A practical cake and biscuit baker will, in the course of his manipulations, have learnt that Hungarian flour of good strength requires more liquid to make a batter of proper consistency than the same weight of ordinary, or even the highest class of superfine flour, does. That is, supposing a workman

is making 4 lbs. of Hungarian flour into biscuits: this 4 lbs. of Hungarian flour will require on an average 4 more eggs (that is, 1 egg to 1 lb. of flour), or its ratio in milk, than if 4 lbs. of superfine flour were used. Then, again, if 4 lbs. of superfine flour is used for a recipe where 4 lbs. of Hungarian flour is prescribed, and only the same number of eggs used, the batter will of a certainty be too soft, with the result, perhaps, that imprecations are heaped on the head of the poor author of this volume, who, having given proper directions, is not responsible for the haphazard mode of mixing practised by some workmen.

The size or weight of each egg should likewise be carefully noted, as this is another factor which leads to soft or stiff batters or doughs, as the case may be. An average egg, with the shell, weighs 2 ozs.; and where a number of eggs are used, if a large proportion of them are appreciably larger or smaller than this, the difference in bulk from that intended to be used may seriously affect the desired result.

In much the same manner mistakes are made in using condensed, separated, new, or skimmed milk, when the author distinctly prescribes a certain measure of churned milk. Supposing that a mixing of cakes requires (as is often the case with the recipes in my books) r quart of churned milk. Well, it frequently occurs in certain districts that churned milk is difficult to obtain, and the manipulator of the goods is either careless about his work, or has no choice but to use one of the milks named above, when the result is a much softer batter, and a poorer quality of goods, than would have been secured by close adherence to the directions given. I do not wish to be hard upon those whose thoughtless and impracticable methods are responsible for such failures, for I am well aware that many well-meaning members of the trade need to be educated in the details of their business; but I do emphatically protest against

unthinking aspersions being recklessly thrown at the heads of authors of technical works, as if *they* could be held responsible when their ideas and directions are disregarded.

To recapitulate, fewer eggs must be used in making a mixing with soft flours than would be required, according to the recipe, for stronger flours. Also, where churned milk is prescribed, and it is found necessary to substitute any of the above milks, or water, in its place, a smaller quantity will be required of such other milk, or water, to take up the same quantity of flour.

It is points like these which I specially urge on beginners to study and prove for themselves, for on their verification depends, to a great measure, failure or a success in the use of the recipes given in the following pages, and a reputation for good work.

A common but (I may say) a pernicious habit obtains in various workshops in the mixing of cakes, it being the practice in such shops to make one large mixing of plain batter to serve for a variety of articles, and then to add fruit seeds, cocoa-nut, or other ingredients, to portions of the batter, to make up the several varieties of cakes required—seed, plum, madeira, cocoa-nut, &c.—all being made out of the one mixing. But this mode should not be followed. The addition of the various ingredients, after the batter has been mixed a short time, tends to disturb the aeration caused by the chemicals used in the mixing, and also, in a certain degree, to destroy the lightness of the batter effected by the creaming process where that has been adopted.

<sup>[</sup>GOOD OR BAD FLOUR (p. 13).—Since the first edition of this work was issued, the author has invented and introduced to the trade his "Automatic Flour Tester," for accurately testing the strength and quality of flour. He has also invented a "Compressed Yeast Tester," which should accompany the above. Both of these articles can be obtained from Messrs. Baker & Sons, City Road, London.]

#### III. BREAD, TEA CAKES, BUNS, ETC.

#### I.-To make Home-made Bread.

Put 1 stone of fine flour into your mixing pan; make a hole in the middle of the flour, and press the sides of the hole to prevent the liquid running through; dissolve  $2\frac{1}{2}$  ozs. of yeast in 1 gill of water, and put it in the hole made in the flour; mix a little flour in the liquid to make a thin batter, cover your pan over and let it rise to a nice cauliflower top; when ready, dissolve  $2\frac{1}{2}$  ozs. of salt in 1 gill of water, put this into your pan, and then take sufficient water (or water and milk) to make all into a nice dough; let it rise a little in the pan, then weigh off into your tins, and prove and bake. The heat of the water should be between  $80^{\circ}$  and  $90^{\circ}$  Fahr.

#### 2.—Bread-making by the Old Method.

To make a sack of flour into bread the baker takes the flour and empties it into the kneading trough; it is then carefully passed through a wire sieve, which makes it lie lighter and reduces any lumps that may have formed in it. Next he dissolves 2 oz. of alum (called in the trade "stuff" or "rocky") in a little water placed over the fire. This is poured into the seasoning tub with a pailful of warm water, but not too hot. When this mixture has cooled to a temperature of about 84 degrees, from 3 to 4 pints of yeast are put into it, and the whole having been strained through the seasoning sieve, it is emptied into a hole made in the mass of flour and mixed up

with a portion of it to the consistency of thick batter. Dry flour is then sprinkled over the top. This is called the quartersponge, and the operation is known as "setting." The sponge must then be covered up with sacks, if the weather be cold, to keep it warm. It is then left for three or four hours, when it gradually swells and breaks through the dry flour laid upon its surface. Another pail of water impregnated with alum and salt is now added, and well stirred in, and the mass sprinkled with flour and covered up as before. This is called setting the half-sponge. The whole is then well kneaded with about two more pailfuls of water for about an hour. It is then cut into pieces with a knife, and to prevent spreading it is pinned, or kept at one end of the trough by means of a sprint-board, in which state it is left to "prove," as the bakers call it, for about four hours. When this process is over the dough is again well kneaded for about half an hour. It is then removed from the trough to the table and weighed into the quantities suitable for each loaf. The operation of moulding, chaffing, and rolling up can be learnt only by practice.

#### 3.—Modern Way of making Bread.

The modern way of making bread is as follows: Put I sack, or 20 stone, of flour into the trough, and, to take it all up, sponge 12 gallons of water of the required temperature, and from 10 to 16 ozs. of yeast, according to the strength. Then dissolve 2 lbs. of salt in the water and mix all together. In the morning, or when taken up again, add 6 gallons of water and 1½ lb. of salt. If a quick or "flying" sponge is required to be ready in an hour and a half, empty the sack of flour into the trough. Make a sprint, add 12 gallons of water of the required heat and 2 lbs. of yeast, and as much flour as you can stir in with the hand. Let it rise for one hour and a half; wild ô gallons more water (at the temperature the sponge is set,

which should be about 100 degrees Fahr.), and  $3\frac{1}{2}$  lbs. of salt. Make all into a nice-sized dough; let it stand three-quarters of an hour, then scale off.

#### 4.—Scotch Style of making Bread.

The bread-making industry has made great strides in Scotland. In Glasgow alone there are two firms which each bake over two thousand bags of flour a week-namely, J. and B. Stevenson and Bilsland Brothers—while five other firms each bake from five hundred to one thousand bags a week. respect to the output, Scotland is a long way in advance of either England or Ireland. I can well remember the time when oatmeal cakes and scones were the staple food in Scotland; but such food is now notable by its absence. brings to mind a story I once heard of an Englishman and a Scotchman who were arguing on the merits of their respective countries. The Englishman said, "Man Sandy, you are all fed on oatmeal! Why, in England we only feed our horses on oats." Sandy's reply was, "A dinna ken, man, but what you say is a' very true; but where wull ye get sic braw horses and sic braw men?"

As I have said before, Parisian barm is the kind most used in Scotland; in fact, nearly all the Scotch advertisements require "men used to Parisian barm." However, I have noticed lately that German yeast is steadily making its way in the North. The Scotch used generally to make their bread with what they called potato ferment. Now it is mostly quarter or full sponges. To make I sack of flour into bread with a quarter sponge take I gallon of water of the required temperature, add ½ a gallon of Parisian barm, and sufficient flour to make it into a good stiff dough. This is generally set between one and two o'clock, and is ready to take about half-past four. It should be dropped when ready an inch in the quarter boat

or barrel. Empty it into the trough, add 10 gallons of water, dissolve 2 lbs. of salt, and mix all into a well-beaten sponge. Add 6 gallons of water of the required temperature and 1½ lb. of salt in the morning, or when you take the sponge, and make all into a nice dough. The softer you can work the sponge the clearer and showier will be the loaf.

To make  $\mathbf{r}$  sack of flour with a full sponge, take  $\mathbf{r}$  to  $\mathbf{r}$  gallons of barm, about  $\mathbf{r}$  o gallons of water of the proper temperature with  $\mathbf{r}$  lbs. of salt dissolved in it; make all into a nice-sized sponge. When ready add 6 gallons of water of proper temperature, and  $\mathbf{r}$  lb. of salt, and make it into dough.

Care should always be taken to keep the barm clear of grease and churned milk, especially if the milk is sour.

There are a great many substitutes for wheat-flour bread, some of which I will enumerate; but I do not think it needful to give the recipes for them, as the recipes and formulæ I have given are evidently those most popular in the English, Scotch, and Irish bakehouses. Among the many substitutes for wheat bread are the following: bread corn, rice bread, potato bread; bread made of roots, ragwort bread, turnip bread, apple bread, meslin bread, salep bread, Debreczen bread, oat and barley bread. The Norwegians, we are informed, make bread of barley and oatmeal baked between two stones; this bread is said to improve by age, and may be kept for as long as thirty or forty years. At their great festivals the Norwegians use the oldest bread, and it is not unusual at the baptism of infants to have bread made at the time of the baptism of their grandfathers.

#### 5.-Home-made Whole Meal Bread.

Take I stone of wheat meal (granulated is best); put your flour in the basin or mixing bowl, and make a hole in the centre of the meal: dissolve 2 ozs. of yeast in a gill and a half

of water, about 90° Fahr.; pour the yeast and water into the hole, and mix in as much of the meal as will make a soft batter; cover it up, and when it is ready (which you will know by its having a nice cauliflower top), add 2½ ozs. of salt, and sufficient water, at a temperature of say 80° Fahr., and mix all lightly into a nice mellow dough; put it past, with a cover over it, till you see it commence to rise; then divide it into the sizes required and place in tins to prove; bake in a moderate oven.

Wheat meals, and brown or second flours, do not require so much working, either in the sponge or with the hands, in making it into dough, as do the flours of a finer quality.

#### 6.—Whole Meal Bread.

(For Master Bakers, as generally used in the Trade.)

When setting your ordinary sponges at night for fine bread, dissolve 2½ ozs. of yeast and 2½ ozs. of salt in 1½ gallons of water, about 4° to 6° Fahr., under whatever heat at which you may be setting your fine sponges (according to the nature of the meal you are using); take as much whole meal flour as will make this quantity of water into a weak sponge, and in the morning, when it is ready, give it half a gallon of water off same heat as your fine sponges, with 5 ozs. of salt, and make all lightly into a dough so that there is no "scrape" about it, and work off in the same way as your ordinary bread.

## 7.—Unfermented, or Diet Bread.

Take 8 lbs. of granulated wheat meal (or meal made with a mixture of barley meal and wheat meal properly blended), 4 ozs. of cream of tartar, and 2 ozs. of carbonate of soda; mix the tartar and soda amongst the flour and sift all through a sieve; make a bay, and add 2 ozs. of crushed salt and 4 ozs. of castor sugar, putting the above in the bay and pouring in a little

churned milk to dissolve the salt and sugar; then add as much churned milk as will take the 8 lbs. of meal in, and make into a nice-sized dough; weigh off, and bake in oval tins. They should be put immediately into the oven.

I consider this the very best mode of making wheat meals into bread; bread thus made eats well, and keeps moist longer than fermented meals.

## 8.-Rye Bread.

Rye bread used to be in greater favour with the public than it now is, but I consider that is owing to the sodden, heavy way in which it is generally made; for if rye flour is properly blended with fine flour, instead of the barley meal generally used, it produces a very nice-flavoured loaf.

Set a sponge at night with fine flour—say, I gallon of water,  $1\frac{1}{2}$  ozs. of yeast, and  $1\frac{1}{2}$  ozs. of salt; let your sponge be about the same consistency as for muffin batter; in the morning add I quart of water and 3 ozs. of salt, and make your dough up with rye meal; let your sponge be set of the same heat as for wheat meal bread.

I have adopted this plan, and find it gives general satisfaction. In baking wheat meals, or other meals of the same nature, your oven should be 30° or 40° by the pyrometer under the heat used for fine bread.

## 9.—Coarse Bread.

Coarse flour (or "overheads," as it is generally called in the south of Scotland) is the cheapest grade of flour made, and if properly manufactured it will vie with any class of flour in the market for a fine, sweet, nutty flavour; but of course it is dark in colour, and I have seen flour of this grade very strong and carry an exceedingly large quantity of water.

In a test I had some time ago, I produced 110 4-lb. loaves, weighed in dough at 4 lbs. 6 ozs., out of 20 stone of this flour; but I may say that the flour was stone-dressed, and milled in the old style. This same class of flour was in general use in Scotland twenty years ago, and was generally made into coarse or second bread, and coarse "twopennies." Many a poor family—ay, and rich families too—have thriven and had their hearts made glad on the produce of this grade of flour.

To MAKE COARSE BREAD.—Take, say I gallon of water, at the same temperature as for wheat meal bread; dissolve I does not yeast, and the same quantity of salt, in the water; make into an ordinary-sized sponge, and when ready in the morning add half a gallon of water and about 4 ozs. of salt; then make all into a dough, and work off as other doughs.

This flour can be sponged the same way as fine flour for a quick or flying sponge, only care should be used in not setting the sponge too warm, as I find that it ferments and works more quickly than the finer grades of flour.

## 10.—Germ Flour Bread.

Germ flour is amongst one of the newest kinds of flour placed before the public as a speciality. It is in appearance something like granulated wheat meal, and the vendors of it claim to have found a new process of removing the germ from the flour, and subjecting it to a certain process before it is again mixed with the flour. I am having germ bread made almost daily. Our mode of making it is as follows:—

Dissolve  $1\frac{1}{2}$  ozs. of yeast in half a gallon of water, say 90° Fahr., and mix with this about 7 lbs. of germ flour; it should be ready in about an hour and a nalf; weigh off and prove; use no salt, as we think there is a certain amount of salt (or

some substitute for salt) ground amongst the flour. For this class of bread it makes a very nice-eating loaf.

#### 11.—Tea-Cakes.

To be able to make a good tea-cake is considered a great point in the baking trade. The following not only makes good tea-cakes, but also capital Scotch cookies.

Take ½ a gallon of water at, say, 94° Fahr.; add 1 lb. of moist sugar, 5 ozs. of German yeast; dissolve all together, add, say, ½ lb. of flour and mix. When well risen, add 1 lb. of lard and butter, 2 ozs. of salt, a few currants to taste; mix all together into tea-cake dough. Let it remain in a warm place for about half an hour, then weigh off at 8 or 9 ozs. for 2d.; prove, and bake.

# 12.-Queen's Bread.

This can be made with the same dough, but omitting the currants, and making the dough tighter than for tea-cakes; add I egg to each pound of dough. Weigh at 3 ounces for a penny, and make into different shapes, such as half-moons, cart-wheels, twists, &c.

# 13.—Sally Luns, Yorkshire, or Tea Cakes.

Take 1 quart of milk,  $\frac{1}{4}$  lb. of moist sugar, and 2 ozs. of German yeast. Ferment this with a little flour, and when ready, add  $\frac{1}{2}$  lb. of butter (some add also 4 eggs to this quantity) and make into dough as for tea-cakes; butter some rings or hoops, and place them on buttered tins, weigh or divide into 5 or 6 ozs. for twopence; mould them round, put them in the hoops, and, when half proved, make a hole in each with a piece of stick. Do not overprove them, or they will eat poor and dry. When baked, which will be in about ten or fifteen minutes, wash over the top with egg and milk.

#### 14.—Muffins.

Sift through the sieve 4 lbs. of good Hungarian flour; take as much water and milk as will make the above into a nice-sized batter, having previously dissolved 2 ozs. of yeast, r oz. of sugar, and 3 oz. of salt in the liquid; then beat this well with your hand for at least ten minutes; after it has half risen in your pan beat again for other ten minutes; then let it stand till ready, which you will know by the batter starting to drop. Have one of your roll-boards well dusted with sifted flour, and with your hand lay out the muffins in rows. The above mixture should produce 24 muffins. Then, with another rollboard slightly dusted with rice flour, take the muffins and with your fingers draw the outsides into the centre, forming a round cake; draw them into your hand and brush off any flour that may be adhering to them; place them on the board dusted with rice, and so on till all are finished; then put them in the prover to prove, which does not take long. The heat of the liquid for muffins (or crumpets) should range from 90° to 100° Fahr., according to the temperature of the bakehouse.

One great point to guard against in fermenting cakes or bread, is to see that your sponge or dough does not get chilled. By the time your muffins are ready, have the stove or hot plate properly heated, then row them gently on to the hot plate so as not to knock the proof out of them; when they are a nice brown turn them gently on the other side and bake a nice delicate brown.

15. Another way.—Some persons now make muffins after the same formula as for tea cakes, namely, moulding one in each band and pinning out the size required, then proving and baking. I have tried that way more than once, but I cannot get the muffins to appear anything like what my experience

teaches me a muffin should be. Practice and judgment are required to make one proficient in muffin-making.

There has recently been introduced to the trade a hot plate heated with gas, which will go a long way in helping the muffinmaker. It is both cleaner, handier, and you can bake with it to a more certain degree of heat.

# 16.—Crumpets.

Crumpets are generally made by muffin-makers, the most modern formula being the following:-Take 4 lbs. of good English flour, 2 ozs. of good yeast, and 2 ozs. of salt. The flour and salt may be sifted together. Take I quart of milk, and 11 quarts of water, at about 100? Fahr.; dissolve your yeast in the water, then mix in your flour and salt; make all into a thin liquid paste, giving it a thoroughly good mixing; let it stand for one hour, when you may again give it a thoroughly good beat; let it stand for another hour, when it will be ready to bake off. In the meantime thoroughly clean your stove or hot plate before it gets hot, and give it a rub over with a greasy cloth; then have your rings of the size required (they should be half an inch in depth); slightly grease them, and see that they are greased for each round of the hot plate; have a cup in one hand and a saucer in the other to prevent the batter dropping; pour half a cup of the batter into the rings and spread them with a palette knife to a level surface, putting what comes off (if any) back into your pan. when the bottom part is of a nice golden colour, turn them over with your palette knife, turning the ring at the same time, and bake off a nice colour. Remove them from the stove or hot plate, and lay them on clean boards for a couple of minutes, when with a gentle tap your rings will come clear; and so on till finished. Nothing but careful practice, and particular attention to the whys and wherefores of both hot plates and batter, will make a good muffin or crumpet-maker.

#### 17.—Oatmeal Cake.

Take 7 lbs. of medium oatmeal,  $1\frac{1}{2}$  oz. salt,  $1\frac{1}{2}$  oz. carbonate of soda,  $1\frac{1}{2}$  oz. cream of tartar,  $1\frac{1}{2}$  lb. of flour,  $1\frac{1}{2}$  lb. of lard. Rub the lard in the oatmeal and flour, having previously mixed all the other ingredients in the oatmeal; make a bay, add sufficient cold water to make all into a good working dough, weigh off at 8 ozs., mould up, pin out the size you think most suitable, cut into four, and place on clean dry tins. Bake in a sharp oven.

#### 18.—Bath Buns.

t lb. of flour, 8 ozs. of butter, 8 ozs. of sugar, 4 eggs, a little warm milk, τ oz. of Parisian yeast, some citron peel cut small, and half a nutmeg grated. This will make fourteen twopenny buns.

Rub the butter in with the flour, make a bay and break in the eggs, add the yeast with sufficient milk to make the whole into a dough of moderate consistency, and put in a warm place to prove. When it has risen enough mix in the peel, a little essence of lemon, and the sugar, which should be in small pieces about the size of peas. Divide into pieces for buns, prove and bake in gentle heat. They may be washed with egg and dusted with sugar before proving.

19. Another Way.—4 lbs. of flour, 1 lb. of butter, 6 ozs. of sugar, 4 ozs. of yeast, 4 eggs, and sufficient milk to make all into a dough; add essence of lemon.

Warm the milk, add the sugar and yeast with sufficient flour to make a ferment; when ready, add butter, eggs, and remainder of flour, with currants or peel to taste. Weigh or divide into 3 ozs. each, mould them up round egg on top rolled in castor sugar; slightly prove, bake in moderate oven.

#### 20.-Hot Cross Buns.

Take I quart of milk or water, 3 ozs. of yeast, 12 ozs. of moist sugar, 12 ozs. of butter, 1 oz. of salt, with sufficient flour to make a nice mellow dough.

Proceed the same as for tea-cakes (p. 24), adding spice, currants, and peel to taste; weigh 4 ozs. for a penny, make a cross in the middle of the bun, wash over with egg, and prove. Spice, however, is very seldom used, as it tends to darken the buns, and thus giving them a poor appearance. An ingenious apparatus has been invented called a Patent Bun Divider, which greatly facilitates the making of these buns, and cannot fail to be of great service where large quantities of buns or cakes are required to be divided. All that is needed is to weigh 8 lbs. of dough, place it in the pan, and at one stroke of a lever thirty buns or cakes are divided ready to mould.

## 21.—Chelsea Buns.

Take plain bun dough (or if for common buns, bread dough), roll it out in a sheet, break some firm butter in small pieces and place over it, roll it out as you would paste; after you have given it two or three turns, moisten the surface of the dough, and strew over it some moist sugar; roll up the sheet into a roll, and cut it in slices; or cut the dough in strips of the required size and turn them round; place on buttered tins having edges, half-an-inch from each. Prove them well, and bake in a moderate oven. They may be dusted with loaf sugar either before or after they are baked. The quantity of ingredients used must be regulated by the required richness of the buns. ½ lb. of butter, ½ lb. of sugar, with 4 lb. of dough,

will make a good bun. When bun dough is used, half the quantity of sugar will be sufficient; some omit it altogether.

#### 22.—Balmoral Cakes.

3½ lbs. of flour, I lb. of butter, I lb. of sugar, 5 eggs, nearly I quart of milk, a few caraway seeds, with 1½ oz. of carbonate of soda and tartaric acid, mixed in proportion of I oz. of soda to ¾ oz. of acid.

Mix the soda and acid well with the flour, then rub in the butter and sugar; make a bay with the flour, add the seeds, beat up the eggs with the milk, and make all into a dough. Put into buttered pans according to the size; dust with castor sugar, and bake in a moderate oven.

#### 23.—Balloon or Prussian Cakes.

Take currant bun dough and make it into a round flat cake of any required size, and place it on a buttered tin. When it is about half proved, divide it with a long, flat piece of wood having a thin graduated edge, into eight equal parts, and place it again to prove. When it is proved enough, brush over the top lightly with the white of an egg well whisked, dust it with fine powdered sugar and sprinkle it with water, just sufficient to moisten the sugar. Bake it in a rather cool oven to prevent the icing getting too much coloured.

## 24.—Saffron Buns.

Take the same mixture as for tea cakes, add r oz. of caraway seeds, and colour it with saffron. Mould them round, and put them on the tins so as not to touch. When they are near proof, wash the tops with egg and milk, and dust them with castor sugar. Put them in the oven to finish proving, and bake them in a moderately hot oven.

#### 25.—Cinnamon Buns.

Made same way as saffron buns, but leaving out the caraway seeds and saffron, and using instead sufficient ground cinnamon to flavour them.

#### 26.-Jubilee Buns.

2 lbs. of flour,  $\frac{3}{4}$  lb. of butter,  $\frac{3}{4}$  lb. of sugar, 4 eggs,  $\frac{1}{2}$  ozof voil.

Rub the butter in with the flour, make a bay and add the sugar, pound the salt in a little milk and pour it in, break the eggs, and mix all together into a dough. Make six buns out of I lb. of dough, mould them round, wash the top with eggs, put some currants on the top, and dust with sugar.

## 27.—German Buns,

4 lbs. of flour, 2 ozs. of tartar, 1 oz. of carbonate of soda, 12 ozs. of butter,  $1\frac{1}{2}$  lbs. of sugar, 4 eggs, 10 drops of essence of lemon, with milk.

Mix tartar and carbonate of soda with the flour, make a sprint or bay, put butter and sugar in bay, cream; add eggs, then milk, make all into a dough, and size them off on buttered tins one inch apart. Wash over with egg, and put a little sugar on top, and bake in a moderate oven.

# 28.—Common German Buns (for wholesale purposes).

4 lbs. of flour, 2 ozs. of tartar, 1 oz. of carbonate of soda,  $\frac{1}{2}$  lb. of lard,  $1\frac{1}{2}$  lb. of moist sugar, a little turmeric and churned milk; then proceed as for best German buns. Bake in a sharp oven.

## 29.—London Buns.

Take I pint of milk warmed in a basin, add 2 ozs. of yeast, 8 ozs, of moist sugar, and make a dough with sufficient flour.

When the sponge is ready add 12 ozs. of butter, a pinch of salt, and have ready 4 ozs. of chopped peel. Mix all in the dough with 2 eggs and lemon, and prove. When about half proved wash over with yolk of egg. Put sugar on top when full proved.

# 30.—Penny Queen Cakes.

1½ lb. of butter, 2 lbs. of sugar, 15 eggs, 2 lbs. of flour, 1 lb. of patent flour. Cream butter and sugar in a basin, add eggs, then flour, and as much milk as will make a nice batter. in fluted pans.

#### 31.—Patent Flour.

Take 4 ozs. of tartar, and 2 ozs. of carbonate of soda, and 8 lbs. of flour, and sift through a sieve three times.

# 32.—Penny Rice Cakes.

4 lbs. of flour,  $2\frac{1}{2}$  lbs. of castor sugar,  $1\frac{1}{4}$  lb. of butter, 10 eggs, I oz. of tartar,  $\frac{3}{4}$  oz. of carbonate of soda,  $\frac{1}{2}$  lb. of ground rice, milk to dough. Cream butter and sugar together, add eggs; when well creamed, add flour, rice, and milk. Bake in small round hoops papered round the side.

## 33.—Cocoanut Cakes.

These are made in the same way, with the same mixture, but leaving out the rice and adding the same quantity of coco anut. Dust coco anut on the top of each.

## 34.—Albert Cakes.

Cream 12 oz. of butter with 1 lb. of sugar, add 13 eggs; mix  $\frac{1}{2}$  oz. of carbonate of soda and  $\frac{1}{4}$  oz. of acid with 2 lbs. of flour; weigh 8 ozs. of currants. Mix all together with milk, and bake in a small edged pan. Cut into squares when cold.

# IV. GINGERBREAD, PARKINGS, SHORT-BREAD, ETC.

# 35.—Queen's Gingerbread.

Take 2 lbs. of honey,  $1\frac{3}{4}$  lb. of best moist sugar, and 3 lbs. of flour,  $\frac{1}{2}$  lb. of sweet almonds blanched, and  $\frac{1}{2}$  lb. of preserved orange peel cut into thin fillets, the yellow rinds of two lemons grated off, 1 oz. of cinnamon,  $\frac{1}{2}$  oz. of cloves, mace, and cardamoms mixed and powdered.

Put the honey in a pan over the fire with a wineglassful of water, and make it quite hot; mix the other ingredients and the flour together, make a bay, pour in the honey, and mix all well together. Let it stand till next day, make it into cakes, and bake it. Rub a little clarified sugar until it will blow in bubbles through a skimmer, and with a paste-brush rub over the gingerbread when baked.

## 36.—German Gingerbread.

Same as Queen's Gingerbread, but dust tins with flour instead of grease.

## 37.—Spiced Gingerbread.

Take 3 lbs. of flour, 1 lb. of butter, 1 lb. of moist sugar, 4 ozs. of candied lemon or orange peel cut small, 1 oz. of powdered ginger, 2 ozs. of powdered allspice, ½ oz. of powdered cinnamon, 1 oz. of caraway seeds, and 3 lbs. of treacle.

Rub the butter into the flour, then add the other ingredients,

and mix in the dough with the treacle. Make it into nuts or cakes, and bake in a cool oven.

# 38.—Scarborough Gingerbread (for wholesale purposes).

Take 180 lb. of treacle, 4 lbs. of lard, 4 lbs. 10 ozs. of carbonate of soda, 2 lbs. 11 ozs. of caraway seeds, 2 lbs. 11 ozs. of ginger, and  $\frac{1}{2}$  a gallon of water to dissolve the soda. Mix all together with a sufficient quantity of flour.

This should turn out about 390 lbs. of very good gingerbread. Wash with glue and water which has been boiled.

The taste for gingerbread is very widespread, large quantities of the best quality being exported to India. Holland is regarded as carrying off the palm for making good gingerbread. Shakespeare makes mention of it in *Love's Labour's Lost*, where he says, "An I had but one penny in the world thou should'st have it to buy gingerbread."

# 39.—Ginger Cakes.

 $2\frac{1}{4}$  lbs. of flour,  $\frac{1}{2}$  lb. of butter, 1 lb. moist sugar, 2 ozs. of ginger. Rub the butter in with the flour and make the whole into a paste with prepared treacle. Make them into round flat cakes, wash the top with milk, lay a slice of peel on each, and bake in a cool oven.

# 40.—Prepared Treacle.

Take 4 lbs. of treacle, 1 oz. of alum, 2 ozs. of pearlash, and mix.

# 41.—Prepared Treacle for Thick Gingerbread.

Take 7 lbs. of treacle, 3 ozs. of potash, 1 oz. volatile salt, and 2 ozs. of alum. The colour of the gingerbread when baked will be according to the quality of the treacle used. Golden syrup makes the lightest coloured and best.

# 42.—Laughing or Fun Nuts.

I lb. of gingerbread dough, 3 ozs. of butter, 3 ozs. of sugar, 1 oz. of cayenne pepper. Mix all together, pin out in a sheet, one-eighth of an inch thick. Cut them out the size of a penny. They are very hot.

# 43.—Grantham or White Gingerbread.

4 lbs. of flour,  $2\frac{1}{2}$  lbs. of loaf sugar, 4 ozs. of butter, 1 oz. of volatile salt, 1 pint of milk,  $\frac{1}{2}$  oz. of ginger,  $\frac{1}{4}$  oz. of ground cinnamon, nutmeg, and mace,  $\frac{1}{2}$  oz. caraway seeds.

# 44.—Spice Nuts.

3 lbs. of flour, I lb. of butter, I lb. of moist sugar, 4 ozs. of candied peel cut small, I oz. ginger, 2 ozs. allspice, ½ oz. of cinnamon, I oz. caraway seeds, 3 lbs. prepared treacle. Mix same as other doughs.

- 45. Another Way.—Take 3 lbs. of flour, 2 lbs. of sugar, 2 lbs. of treacle, 2 ozs. of ginger, ½ oz. of carbonate of soda, 2 drs. of tartaric acid. Mix the day before baking.
- 46. Another Way.—7 lbs. of flour, 5 lbs. of syrup,  $2\frac{3}{4}$  lbs. of moist sugar, 1 lb. of lard, 4 ozs. ginger,  $\frac{1}{2}$  oz. of tartaric acid,  $\frac{1}{2}$  oz. of carbonate of soda,  $\frac{1}{2}$  oz. of cinnamon,  $\frac{1}{2}$  oz. of mace. Mix and work same as other doughs. This is a capital mixture.

# 47.—Light Gingerbread.

Dr. Colquhoun gives a recipe for preparing a light ginger-bread as follows: Take I lb. of flour,  $\frac{1}{4}$  oz. of carbonate of magnesia, and  $\frac{1}{8}$  oz. of tartaric acid. Mix the flour and magnesia thoroughly, then dissolve and add the acid; take the usual quantity of butter, treacle, and spice; melt the butter and pour it with the treacle and acid into the flour and magnesia. The whole must then be made into a dough by kneading, and

set aside for a period varying from half an hour to an hour; it will then be ready for the oven, and should not on any account be kept longer than two or three hours before being baked. When taken from the oven it will prove a light, pleasant, and spongy bread, having no injurious ingredients in it. That made with potash, says Dr. Colquhoun, gives the bread a disagreeable alkaline flavour, unless disguised with some aromatic ingredient, and is likely to prove injurious to delicate persons.

# 48.—Italian Jumbles, or Brandy Snaps.

6 lbs. of flour, 7 lbs. of good rich sugar, 1½ lb. of butter or lard, 2 ozs. of ginger or mixed spice, 6 lbs. of raw syrup. Make the whole into a moderately stiff paste or dough, roll out into sheets fully an eighth of an inch thick, cut them with a plain round cutter of 3 inches diameter, put them on tins well greased, and bake in a moderate oven. When baked cut them from the tin and lay them on the peel-shaft till they are hard. If they should get too cold to turn, put them in the oven to warm. Brandy snaps are the same as above, without being turned.

Note.—For cakes, spice nuts, or biscuits of a small size, that require washing on top, use a piece of linen the size of the tin, dip it in water, squeeze it, and spread it on top of the snaps or biscuits and gently press your hand over it. This will prevent them from running together on the tins.

## 49.—Halfpenny Gingerbread Squares.

8 lbs. of flour, 4 lbs. of treacle, 3 ozs. of pearlash, 3 ozs. of alum, and 1 oz. of carbonate of soda. Make a bay, put in the treacle, add the soda, dissolve the pearlash in  $\tau$  gill of cold water and pour it on the treacle; put another gill of water in a small pan, add the alum, and let it boil till it is dissolved; then pour it on the other ingredients. Mix all together, put

into two tins about 24 inches by 18 inches with an edge 1 inch high. Cut out of each tin 2s.  $3\frac{1}{2}$ d. worth. This mixture is for wholesale purposes, and pays well.

Note.—Nearly all mixtures made in this way are best made the day before.

# 50.—Hunting Nuts.

7 lbs. of flour,  $3\frac{1}{2}$  lbs. of treacle, I lb. of sugar, I lb. of butter, 3 ozs. of pearlash, 3 ozs. of alum, half a teaspoonful of essence of lemon, I lb. of lemon peel cut small. Mix as above; roll out the dough in strips, and with the fingers break off pieces the size of a small marble, lay on the tins in rows and bake in a moderate oven on tins slightly buttered.

# 51.—Parkings.

 $3\frac{1}{2}$  lbs. of oatmeal, I lb. of flour, I lb. of butter, 8 ozs. of moist sugar,  $\frac{1}{2}$  oz. of baking powder, with sufficient syrup to make all into a moderately stiff dough; weigh off at 4 ozs. for a penny, mould up round, and place on tins  $2\frac{1}{2}$  inches apart. Bake in a cool oven.

**52.** Another Way.—6 lbs. of snap dough, 12 ozs. of moist sugar, 10 ozs. of butter,  $1\frac{3}{4}$  lb. of oatmeal,  $1\frac{1}{2}$  oz. of carbonate of soda, 1 oz. of caraway seeds, 1 oz. of seasoning. Proceed as above.

## 53.—Parking Cake.

3 lbs. of oatmeal, 1 lb. of flour, 4 lbs. of treacle, 1 lb. of good butter, 2 teaspoonfuls of carbonate of soda, 1 gill of beer. Mixed up as above. Baked in an edged pan 3 inches high, in a cool oven.

#### 54.—Scotch Shortbread.

Take 1 lb. of butter, 2 lbs. of flour, 8 ozs. of powdered sugar. Mix the sugar in the butter, then take in all the flour and

thoroughly mix and rub all together till of a nice mellow colour and easy to work; weigh off the size required, and shape into square or round pieces; dock them on the top, notch them round the sides, put on clean dry tins, and bake in a moderate oven.

# 55.—English Shortbread.

I lb. of flour,  $\frac{1}{2}$  lb. of sugar,  $\frac{1}{2}$  lb. butter, 2 eggs. Mix as for Scotch Shortbread, ornament the tops with designs of neatly-cut lemon peel and caraway comfits.

#### 56.—French Shortbread.

2 lbs. of flour,  $\frac{3}{4}$  lb. of butter,  $\frac{3}{4}$  lb. of sugar, 4 eggs,  $\frac{1}{2}$  oz. of ammonia. Rub the butter in the flour, make a bay, put in the eggs, sugar, and ammonia; beat them well with your hand, then draw in the flour and butter; make all into a dough, weigh at 12 ozs., chaff them up round, pin out a good breadth, mark them off into eight, place a piece of peel on each, and bake in good oven. Cut the marked pieces with a sharp knife after they are baked.

## V. HARD BISCUITS.

#### 57.—Machine-made Biscuits.

In making the dough for hard biscuits it should be kept in a loose crumbly state until the whole is of an equal consistency, then work, rub, or press it together with your hands until the whole is collected or formed into a mass. If the old-fashioned biscuit brake is replaced by a biscuit machine so much the better for the baker and the goods he turns out. If so, then all that is necessary will be to properly adjust the rollers whether for braking (that is making the dough) or rolling out for the cutter. If an amateur tries to make biscuits he will always experience some difficulty in moulding them if they are hand-made. When this is so it would be better to cut them out with a cutter.

## 58.—Ship Biscuits.

These were evidently the first biscuits, from which have sprung all the varieties of hard biscuits which we at present possess. They are of the same character as those which were first made by man in his progress towards civilisation, and were baked or roasted on hot embers. Before this, men knew of no other use for their meal than to make it into a kind of porridge. Biscuits prepared in a simple fashion were for centuries the food of the Roman soldiers. The name is derived from the Latin bis, twice, and the French cuit = coctus, meaning twice baked or cooked.

Ship biscuits are composed of flour and water only; but some think a small proportion of yeast makes a great improvement in them. The method adopted is to make a small weak sponge as for bread previous to making the dough; the necessary quantity of water is then added. The flour used for the commoner sort of these biscuits is known as middlings or fine sharps; and those made from the finer or best are called captains or cabin biscuits. A sack of flour loses, by drying and baking, 28 lbs.

# 59.—Captains' Biscuits.

7 lbs. of fine flour, 6 ozs. of butter, 1 quart of water or milk. Rub the butter in with the flour until it is crumbled into very small pieces, make a bay in the centre of the flour, pour in the water or milk, make it into a dough, and break it when made into dough, chaff or mould up the required size, 4 or 5 ozs. each, pin out with a rolling pin about 5 inches in diameter, dock them and lay them with their faces together. When they are ready bake them in a moderately quick oven, of a nice brown colour. These are seldom made with hand, as the machinery in use outstrips hand-made biscuits of this class in speed and gives a better appearance and quality.

# 60.—Thick Captains.

 $7\frac{1}{2}$  lbs. of flour,  $\frac{1}{2}$  lb. of butter, r quart of water or milk. Mix as directed. When ready weigh out at 2 ozs. each, mould or chaff, roll out, dock quite through and bake in a hot oven. All biscuits of this class require thorough drying in the drying room.

# 61.—Abernethy Biscuits.

(Dr. Abernethy's Original Recipe.)

r quart of milk, 6 eggs, 8 ozs. of sugar,  $\frac{1}{2}$  oz. of caraway seeds, with flour sufficient to make the whole of the required

consistency. They are generally weighed off at 2 ozs. each, moulded up, pinned and docked, and baked in a moderate oven.

Note.—The heat of an oven is not required so strong for biscuits containing sugar, as it causes them to take more colour in less time.

# 62.—Abernethys as made in London.

7 lbs. of flour, 8 ozs. of sugar, 8 ozs. of butter, 4 eggs, 1½ pint of milk, 2 tablespoonfuls of orange-flower water, ½ oz. of caraway seeds.

# 63.—Usual Way of making Abernethy Biscuits.

Take 8 lbs. of flour,  $1\frac{1}{2}$  lb. of butter and lard, 12 ozs. of sugar,  $\frac{1}{2}$  oz. of caraway seeds; some use about  $\frac{1}{2}$  oz. of powdered volatile salts. Proceed to make into dough as before. Well break the dough and finish with either hand or machine.

## 64.-Wine Biscuits.

Take 8 lbs. of flour, rub in 2 lbs. of good butter. Make a bay, add about 1 quart of water, take in your flour and butter and well shake up, and note the more your mixture is shaken up and worked the better biscuits you will have. Also note in shaking up these biscuits, when they are mixed let your two thumbs meet, giving the mixture a shake up in the air till you have all the dry flour worked in and the mixture is nice and moist. Bake in a smart oven on wires.

## 65.—Soda Biscuits.

14 lbs. of flour,  $1\frac{1}{4}$  lb. of butter,  $\frac{1}{2}$  oz. of carbonate of soda, 3 drachms of muriatic acid, 2 quarts of water. Mix as the last, adding the acid mixed with half-a-pint of the water after the dough is shaken up, then finish with the machine.

#### 66.—Boston Lemon Crackers.

26 lbs. of flour,  $2\frac{1}{4}$  lbs. of butter, 5 lbs. of sugar, 2 ozs. of ammonia,  $\frac{1}{2}$  oz. of essence of lemon, 3 quarts of water. This should be made into small round biscuits rather larger than pic-nics. Bake them in a sound oven.

#### 67.—Pic-Nics.

30 lbs. of flour, 4 lbs. of butter, 4 lbs. of castor sugar, 3 ozs. of carbonate of soda, 2 ozs. of muriatic acid, 4 quarts of milk.

#### 68.—Common Pic-Nics.

28 lbs. of flour, 2 lbs. of lard, 2 lbs. of sugar, 2 ozs. of carbonate of soda, 2 ozs. of hydrochloric acid. Mix as above and finish the dough in the usual way. Bake in a moderately brisk oven.

#### 69.—Luncheon Biscuits.

56 lbs. of flour,  $3\frac{1}{2}$  lbs. of lard,  $3\frac{1}{2}$  lbs. of butter,  $1\frac{1}{4}$  lb. of castor sugar, 4 quarts of milk, 4 quarts of water, 2 ozs. of carbonate of soda,  $1\frac{1}{2}$  oz. of hydrochloric acid. Mix as before described. Let the dough be of a good stiffness and broken very clear. The cutters may be either round or oval. They require about 20 minutes' baking. As soon as they are drawing put them in the stove for about two hours.

## 70.—Digestive Biscuits.

Take equal parts of fine flour and wheat-meal flour and mix them together to 5 quarts of milk and water. Use 2½ lbs. of butter and 2 ozs. of German yeast. Rub the butter in the flour, make a bay, pour in your liquor and yeast. Mix the whole into a dough, break it a little, and put it in a warm place to prove. After it is light enough, break it quite smooth and clear, roll it out in a sheet one-eighth of an inch in thickness and cut out your biscuits. As soon as the biscuits are cut out bake in a hot oven.

71. Another way.—5 lbs. of granulated wheat meal, 1 lb. of butter,  $\frac{1}{4}$  lb. of sugar,  $\frac{1}{4}$  lb. of ground arrowroot, 4 eggs, 1 quart of milk,  $\frac{1}{4}$  oz. of carbonate of soda. These are mixed up in the usual way, pinned out and cut with a small round cutter, docked and baked in a moderate oven.

#### 72.—Small Arrowroot Biscuits.

 $5\frac{1}{2}$  lbs. of flour, 8 ozs. of butter, 6 ozs. of sugar, 6 ozs. of arrowroot, 3 eggs, 1 pint of liquor. Prepare as the last. Make 16 biscuits from 1 lb. of dough. Mould and pin into round cakes 3 inches in diameter, dock them with an arrowroot docker, and bake them in a sound oven.

#### 73.—Coffee Biscuits.

4 lbs. of flour, 4 ozs. of butter, 4 ozs. of castor sugar's 5 large eggs, with enough water to fill a pint. Make a bay; after the butter is rubbed in with the flour, add the sugar and beat up the eggs and water together; pour into your bay, make the whole into a dough, break it clear and make it quite thin. When you finish it roll it out the tenth of an inch in thickness, cut with your coffee biscuit cutter and bake them in a brisk oven. If the oven should not be hot enough to raise them round the edges twist up a handful of shavings rather hard and place them round the edges of the biscuits when baking.

## 74.—Victoria Biscuits.

3½ lbs. of flour, 2 ozs. butter, 2 ozs. of sugar, 1 pint of eggs. Make a bay, rub the butter in the flour before you make a bay, add the sugar, pour in the eggs, beat them well up with your hands, make the whole into a dough, break well that it may be clear, roll into thin sheets, cut with an oval cutter the same as used for Brightons, put them on clean tins, and bake in a hot oven the same as Coffee Biscuits.

#### 75.—Shell Biscuits.

5 lbs. of flour, 12 ozs. of castor sugar, 12 ozs. of butter, 1 pint of milk. Make all into a good dough, roll into sheets half-an-inch thick, cut with an oval-pointed cutter in shape thus  $\bigcirc$ , place them on a crimp board and with a knife or scraper curl them up, put on clean dry tins. Bake in moderate heat.

## 76 .-- York Biscuits.

 $5\frac{1}{4}$  lbs. of flour, 12 ozs. of butter, 2 lbs. of sugar, 1 pint of milk. Mix as before into a dough, roll out the dough  $\frac{1}{4}$  of an inch thick, cut them into long strips, and cut them diamond shape or square, dock them either on the table or crimpingboard as your fancy dictates. Bake them in a rather warm oven.

## 77.—Machine Biscuits.

10 lbs. of flour,  $2\frac{1}{4}$  lbs. of butter, 10 ozs. of castor sugar.

1 quart of water. Mix up the same as the others, roll out a sheet  $\frac{1}{2}$  inch in thickness, cut them out in various forms, dock them, and bake on clean dry tins in a moderate oven.

# 78.—Bath Oliver Biscuits.

I quart of milk, I lb. of butter, 2 ozs. of German yeast,  $6\frac{1}{2}$  lbs. of flour. Make the milk warm, add the sugar, yeast and a handful of flour to form a ferment, let it ferment for an hour and a half. Rub the butter into the remaining flour and make all into a nice smooth dough; let it stand about two hours, then roll it out thin; cut the biscuits out with a cutter about three inches in diameter, dock them well, place on clean tins sprinkled with water, wash over with milk when you have them all off, put them in a steam press or drawers for half an hour, and bake in a cool oven.

## 79.—Edinburgh Biscuits.

4 lbs. of flour, 12 ozs. of butter, 6 ozs of sugar, 1 pint of

milk. Mix up in the usual way, break smooth, and make 12 biscuits out of a pound of dough; roll thin, dock them, and bake in a brisk oven. Sold at a halfpenny each.

# 80.-Nursery Biscuits.

Take I quart of milk, 5 ozs. sugar, 3 ozs. yeast, ½ lb. of flour. Mix all together into a ferment and let it drop, add ½ lb. arrowroot, 5 ozs. butter, and as much flour as will make a good dough. Put it away till you think it is ripe enough to work off, which you will know by its appearing light and spongy. When it has reached this stage take 4 lbs. of the dough and roll it out ½ inch thick, cut out with a plain round cutter an inch and a half in diameter, put them on tins a quarter of an inch apart, prove them in steam press, and when ready bake in a sound oven. Put them in a drying stove or some warm place to thoroughly dry them, to make them light and easily digestible.

## 81.—Soda Biscuits.

12½ lbs. of flour, 1 oz. of salt, 6 ozs. of lard, 1 oz. of acid, 1½ oz. of soda, 2 quarts of water. Mix as for Machine Biscuits, break the dough smooth and clear, let it lay for about half an hour, then roll out in large sheets nearly the thickness of three penny pieces, cut out with an oval spring cutter five inches in length and three inches in breadth. The dough must be well made and of a good stiffness. When cut out lay them on top of each other in sixes on carrying boards. Have the oven of a good sound heat and well cleaned out, have a running peel that will hold six biscuits, and run them on the sole of the oven.

# VI. FANCY BISCUITS, ALMONDS, ETC.

# 82.—Digestive Biscuits.

5 lbs. of wheat meal, 1 lb. of butter, 4 ozs. of sugar, 4 eggs, 2 oz. of carbonate of soda in 1 quart of water. Rub the butter in the wheat meal, make a bay, add the sugar, eggs, and soda; mix well together, add the water, and take in the wheat meal. After making it into dough, take about 2 lbs., roll it out into a sheet the thickness of a penny; take it on the pin again, and roll it on to a piece of cloth spread on the table; cut them out with a small oval cutter, put on tins well cleaned but not greased, and bake in a cool oven.

## 83.-Kent Biscuits.

4 lbs. of flour, 1 lb. of butter,  $1\frac{1}{2}$  lb. of sugar, 10 eggs, and 3 drs. of volatile salt. Rub butter in with flour; or make a bay, put in the butter, partly cream it, add eggs and sugar, and voil after well mixing all together; take in the flour and make it into a dough. Roll out a sheet the thickness of two penny pieces, cut out with a small fluted cutter, lay them in rows, take a brush and egg-wash top, lay them on lump sugar previously broken into pieces the size of split peas, and bake on tins slightly buttered, in a moderate oven.

# 84.—Imperial or Lemon Biscuits.

Take  $1\frac{1}{4}$  lb. of flour,  $1\frac{1}{4}$  lb. of sugar, 4 eggs, 4 ozs. of butter, and a pinch of volatile salt. Rub butter in the flour, then take

the sugar and mix it with the flour and butter; make a bay, put in your eggs and voil, and mix all lightly but well together. Take a piece, roll it out same as for hunting nuts, in strips, place on slightly buttered tins I inch apart, and bake on double tins, unless the oven is very cold.

Note.—In making fancy biscuits the tins must be as clean as it is possible to get them. I have seen a whole batch of biscuits spoiled through "only a little bit of dirt," as the boy said when taken to task for his carelessness.

#### 85.—Venice Biscuits.

5 lbs. of flour,  $1\frac{1}{2}$  lb. of butter,  $2\frac{1}{2}$  lbs. of sugar, 11 eggs, 1 lb. of minced peel and 1 oz. of volatile salt. Proceed to make the dough in the same way as for Imperial or Lemon Biscuits, roll out in a sheet, and cut out with a small oval fluted cutter; egg them on the top, and throw them on large crystallised sugar. Bake on slightly buttered tins in a moderate oven.

## 86.—Shrewsbury Biscuits.

- 2 lbs. of Hungarian flour, 1 lb. of sugar, 1 lb. of butter, 4 eggs, pinch of powdered cinnamon, a few caraway seeds, and a little milk, if required.
- 87. Another Way.—14 ozs. of flour, 10 ozs. of sugar, 10 ozs. of butter, 2 small eggs, half a nutmeg grated, a little cinnamon and mace, and a pinch of voil.
- 88. Another Way.— $1\frac{1}{2}$  lb. of flour,  $\frac{1}{2}$  lb. of butter,  $\frac{1}{2}$  lb. of sugar, 1 egg, with sufficient milk to make dough. Some add about  $\frac{1}{4}$  oz. of volatile salt. Rub the butter in with the flour, make a bay, add the sugar, eggs, milk, and spice; make the whole into a dough, roll it out on an even board to the thickness of an eighth of an inch, cut out with a plain round cutter two and a half inches in diameter, place them on clean tins, not buttered, bake in a cool oven. When the biscuits are a little coloured on the edges they are done.

#### 89.—Peruvian Biscuits.

4 ozs. of flour, I lb. of rice-flour,  $\frac{1}{2}$  lb. of arrowroot, I lb. of butter, I lb. of sugar, 6 eggs,  $\frac{1}{2}$  oz. of voil. Make into a dough same as for other biscuits, roll into strips the thickness of your finger, cut them the size of small marbles, and bake on slightly greased tins in a moderate oven.

#### 90.—Currant Fruit Biscuits.

3 lbs. of flour, 12 ozs. of arrowroot, 14 ozs. of butter, 2 lbs. of sugar, 10 eggs, 20 ozs. of currants,  $\frac{1}{2}$  oz. of voil. Proceed to make dough as before; roll out in a sheet the thickness of two penny pieces. Cut with a plain round cutter, and bake in a moderate oven.

# 91.—Snowdrop Biscuits.

I lb. of arrowroot, I lb. of flour, the whites of 10 eggs,  $\frac{1}{2}$  lb. of butter,  $\frac{3}{4}$  lb. of sugar,  $\frac{1}{4}$  oz. of voil. Rub the butter in the flour, add the arrowroot, make a bay, add all the other ingredients, mix into a dough. Proceed the same as for Peruvian biscuits, and bake in a very cool oven.

## 92.—Rice Biscuits.

1\frac{1}{4} lb. flour, \frac{3}{4} lb. rice-flour, \frac{1}{2} lb. butter, 1 lb. sugar, 2 eggs, \frac{1}{4} oz. of voil. Make into dough with a little milk, roll out in sheets same size as for Currant Fruit, place on dry tins, and dust the tops with ground rice.

# 93.—Genoa and Toulouse Biscuits, Exhibition Nuts and Marseillaise Biscuits.

6 lbs. flour, 14 ozs. butter, 4 lbs. sugar, 10 eggs,  $\frac{1}{4}$  oz. voil. Make a nice stiff dough with the rest milk.

Genoas are made by rolling out the dough in strips and cutting off in pieces the length of the little finger. Wash them on top with white of egg and throw on lump sugar the size of split peas.

Marseillaise Biscuits are made from the same dough, rolled out in strips, but cut the size of small marbles. Put about twenty or thirty of them into a sieve, and roll them about to make them round. These are baked on dry tins.

Toulouse Biscuits and Exhibition Nuts have currants added to them. For Toulouse biscuits, roll out the dough in strips, cut the same length as Genoas, and wash the top with yolk of egg. Place on slightly greased tins  $\frac{1}{2}$  inch apart.

For Exhibition Nuts cut the dough the size of small marbles, lay in the tin with the cut side down, and press gently with heel of the hand.

## 94.—Walnut Biscuits.

2 lbs. flour,  $\frac{1}{2}$  lb. brown sugar,  $\frac{1}{2}$  lb. castor sugar,  $\frac{1}{2}$  lb. butter, and yolk of one egg. Simmer the sugar and a little milk over a slow fire, rub the butter into the flour; after the sugar has become cold put it into the bay and make into a stiffish dough. Put the dough into blocks, and give them the impression of half a walnut, after which cut off the surplus dough with a sharp knife, knock out the biscuits, and bake on slightly buttered tins until a nice brown. After they are baked dip in white of egg, and put two together so as to form a walnut.

## 95.—Queen's Drops.

8 ozs. butter, 8 ozs. sugar, 4 eggs, 10 ozs. flour, 6 ozs. currants. Some add a little voil, but if well creamed there is no use for voil. Cream the butter and sugar together, add the eggs, then flour and currants; have ready a linen bag with a small tin funnel at the end of it; have a small cork in the funnel so as to keep the mixture from dropping out, drop them on paper about the breadth of a shilling, put them on tins, and bake in a sound oven.

#### 96.—Cracknel Biscuits.

3½ lbs. flour, 3 ozs. butter, 6 ozs. castor sugar, 13 eggs, 2 drs.

voil. Rub the butter in the flour, make a bay, put in the sugar in powder with the eggs and voil, make the whole into a dough of moderate consistence; break it well and let it be quite clear and smooth; roll out a quarter of an inch thick, cut out with an oval cutter, or one in the form of an oak-leaf, dock them in the centre, lay them on a tray in rows, cover them with a damp cloth. Have a copper on the fire boiling, throw them into the water one at a time face upwards, and after they have risen to the top be careful to turn each biscuit face uppermost. Let them remain this way for two or three minutes for the edges to turn up. When ready take a skimmer and throw them into a pail of cold water. When they have been in the water for about an hour put them in a sieve to strain, and bake on buttered tins in a moderate oven. When baked they should be placed in the drying stove for a few hours.

# 97.—Premium Drops.

I lb. butter, I lb. sugar, 9 eggs, I lb. rice-flour,  $\frac{1}{4}$  oz. voil, I lb. flour, 4 drops essence of lemon. Proceed the same as for Queen's Drops. The batter, however, will be found a good deal stiffer. This makes a nice drop when well got up.

## 98.—German Wafers.

8 ozs. sugar, 8 ozs. eggs, 4 ozs. flour, 1 oz. butter. Put the flour in a small basin, rub in the butter and add eggs and sugar; have the tins well greased, and drop the batter on them with a spoon in pieces a little larger than a penny. Bake in a cool oven. When baked form into the shape of a cone, dip each edge in white of egg, and then each end in coloured sugar. They make a nice show for a window.

# 99.—Crimp, or Honeycomb Biscuits.

4 lbs. flour, 2 lbs. sugar, 1 lb. butter, 9 eggs, ½ oz. voil. Rub the butter in with the flour, make a bay, add the sugar, eggs

and voil. Roll out a sheet a nice thickness. Cut out with a small round plain cutter, but before doing so run over the surface of the dough with a crimp-pin. Bake in a moderate oven.

#### 100.—Hermit Biscuits.

2 lbs. flour, 4 oz. butter, 12 ozs. sugar, ½ oz. caraway seeds, 5 or 6 eggs, ½ oz. voil. Make up the dough as usual for biscuits, cut them out the size of spice nuts with spice-nut cutter, egg them on top; have some loaf sugar, and almonds with the skins on cut the size of split peas, place the biscuits on the sugar and almonds, gently press them down before putting them on slightly buttered tins, and bake in a moderate oven.

#### 101.—Italian Macaroons.

I lb. of Valentia almonds, 2 lbs. of powdered sugar, 7 or 8 whites of eggs. Beat the almonds with whites of eggs, but not so fine as for common macaroons; lay out stiff on wafer-paper; have almonds cut in slices, one into six pieces, lay them on the sides and top of each macaroon; ice them well from the icing-bag, and bake in a slow oven.

## 102.—Common Macaroons.

I lb. Valentia almonds,  $1\frac{1}{2}$  lb. sugar, about 8 whites of eggs. Beat the almonds very fine with the white of an egg in a mortar, and then add the sugar and two or three whites of eggs; beat well together. Take out the pestle, add two more whites, and work them well with a spatter until the whole of the whites are incorporated. Lay out one on wafer-paper and bake it in a slow oven. If it appears smooth and light the mixture is ready, but if not add one more white of egg, as it is hardly possible to ascertain the exact number of whites to use. If ready lay out on wafer-paper, ice them with sugar on top, and bake in a moderate oven.

#### 103.—French Macaroons.

I lb. of Valentia almonds, I lb. of sugar, 5 or 6 whites of eggs. Proceed as before, but instead of beating the almonds with whites of eggs use rose or orange-flower water, and when beaten very fine put in the whites of eggs and sugar, beating them well with the spatter. Lay out one oval on wafer-paper and bake it. If it runs into its shape the mixture is ready; if too stiff, add one more white of egg; lay out on wafer-paper, dust sugar on top, and bake them in a good oven.

#### 104.—Ratafias.

8 ozs. of bitter almonds, 8 ozs. of sweet almonds,  $2\frac{1}{2}$  lbs. of sugar, and about eight whites of eggs. Blanch and beat the almonds with white of egg as fine as possible, and be careful when beating them you do not oil them. When beaten fine, mix in the sugar and beat both well together; then add more whites of eggs, work them well with the spatter, adding more whites of eggs as you proceed. Then lay one or two on dry paper half the size of a macaroon, and bake them in a slow oven. If they are of proper stiffness lay them out; if too stiff, add more whites of eggs to them. Should they be good they will come off the paper when cold; if not, the paper must be laid on a damp table, when they will come off easily.

## 105.—Princess Biscuits.

These are exactly the same as common macaroons, but must be laid out on wafer paper half the size, and a dried cherry put on the top for effect. Use a square of citron on some, and a square of angelica on others. Dust them on top with sugar, and bake them in a slow oven.

## 106.—Rusks.

1 quart of sponge, 4 ozs. sugar, 2 eggs, 2 ozs. of butter. Mix all the ingredients together, make it up the size of bun dough with best flour, let it lie for two hours, make into long rolls and batch them on tins, greasing between each roll. Bake in moderate oven for thirty-five minutes. After they are baked let them lie for one day. Rasp top and bottom off, cut into neat slices, and bake again in a moderate oven until thoroughly crisp and dry, and of a nice brown colour. Put them in a basket, and leave them all night in a warm place. This will make them much crisper. Some add a pinch of ground alum.

# 107.-Rock Almonds (White).

Blanch and cut the long way any quantity of almonds. Make some icing pretty stiff (p. 63), put the almonds into it and let them take up all the icing. Citron, lemon, and orange cut small may also be added. Lay out on wafer paper in small heaps and bake in a very slow oven.

# 108.—Rock Almonds (Pink).

Make any desired quantity of icing, colour it with lake finely ground, mix in as many cut almonds, citron, and lemon as it will take; lay out on wafer paper in small heaps and bake in a slow oven.

## 109.—Rock Almonds (Brown).

Take any quantity of Jordan almonds, cut them up very small (but not blanch them); also citron, lemon, and orange cut small. Prepare some very light icing, with which mix the almonds, &c., into a soft paste. Lay out on wafer paper and bake in a slow oven.

## 110.—Almond Fruit Biscuits.

I lb. of Valentia almonds, I lb. of powdered sugar, 2 or 3 whites of egg. Beat up the almonds very fine with white of one egg; then rub the sugar and almonds into a fine paste with I or 2 whites of egg, divide it into two parts, work 2 ozs. of

flour into one part and roll it out thin for the bottom, cut it square and cover it with good raspberry jam; then roll out another square the same size, and lay it on the top of the fruit, cover this thinly with icing and cut it up into different shapes according to fancy; lay them on wafer paper and bake in a slow oven.

Note.—There will be many cuttings from the above shapes which should not be wasted. Put several bits together in little heaps on wafer paper, put a little icing on top, a bit of green citron, and a small bit of raspberry jam. A little pink icing may also be added. Bake in a slow oven.

## III.—Meringues.

Take any desired quantity of whites of eggs (half duck whites if you can procure them), whisk them until so stiff that an egg will lie on the surface, then mix in with the spatter some fine powdered sugar until they appear of a proper stiffness, which may be known by laying out one oval with a knife and spoon. If it retains the mark of the knife they are ready to bake; if not, more sugar must be added. Lay out oval on dry paper and bake on a piece of wood two inches thick: this is to prevent them having any bottom. They must have a pretty bloom on them when baked. Take one carefully off with a knife, take out the inside and fill it with any kind of preserved fruit. Then take off another and do the same, putting both sides together; and so on till they are all baked. If good they will have the appearance of a small egg.

- 112. Another Way.—The whites of 12 eggs and 1 quart of clarified sugar. Let one person whisk up the eggs as before directed while the sugar is boiled to the degree called "Blown;" then grain the sugar, and mix the whites of eggs and the sugar together. Lay out and bake as before directed.
  - \* To boil sugar to the degree called "Blown," see p. 73.

# 113.—Common Drop Biscuits.

Break the eggs into a round-bottom pan, whisk them till they are hot, having your pan placed over hot water; take them off and whisk them till they are cold, then put in the sugar and whisk till hot, after which again whisk till they are cold. When the eggs and sugar are perfectly light take out the whisk, stir in the flour gently. From beginning to end the operation should not take more than twenty minutes. Cover the tins or wires with wafer paper, and lay out the biscuits any size required from a savoy bag. Dust them over with sugar and bake in a hot oven.

The savoy bag should be of the strongest fustian and so made as to come to a point, like a jelly bag, at the point of which must be fixed a small tin pipe two inches long. Boil the bag two or three times to prevent the mixture passing through.

# 114.—Savoy Biscuits.

For ingredients, take 8 eggs, 1 lb. of sugar, and 1 lb. of flour, and see directions below under *Fruit Biscuits*.

# 115.—French Savoy Biscuits.

Take 8 eggs and 4 yolks, 1 lb. of sugar, and 1 lb. of flour, and see directions below.

## 116.-Judges' Biscuits.

Take 8 eggs and 4 yolks, 1 lb. of sugar, 1 lb. of flour, and a few caraway seeds, and see directions below.

# 117.—Lord Mayor's Biscuits.

Take 8 eggs, 1 lb. of sugar, 1 lb. of flour, and a few caraway seeds, and see directions below.

## 118.—Fruit Biscuits.

For these the ingredients are 6 eggs and 6 yolks, 1 lb. of sugar, and 1 lb. of flour.

To mix the above five recipes, observe the directions given

for Common Drop Biscuits. They must be baked in a hot oven. The Savoy Biscuits must be laid out from a savoy bag on "cap" paper one-half round and one-half long. The French Savoys must be laid out oval, and when baked two are to be put together. The Judges' Biscuits are to be laid out round, about the size of a half-crown; and the Lord Mayor's are to be round, and of double the size. The Fruit Biscuits are to be laid out about the size of a shilling, and preserved fruit put between two of them. Have ready some castor sugar, spread it on a piece of paper, making it smooth on the surface; then lay each half-sheet of paper on which the biscuits are placed on the sugar; let them remain a moment, take them off, give them a shake and bake in a hot oven. Turn each half-sheet on to a clean table, wash the bottom of the paper with clean water, let them lie for a moment, and they will be found to come off easily. Proceed in this way till all are off, and baked.

Note.—Some prefer whisking up sponge mixtures cold. They keep better, but are not so showy.

## 119.—Palais Royal Biscuits.

Make the mixture exactly the same way as for French Savoys. Bake them in paper boxes about two inches long, one inch and a-half wide, and an inch deep. Dust them lightly on the top with sugar and bake in a moderate oven. The boxes must be made of the best writing paper. They are very proper to mix with rout biscuits.

## 120.—Rice Biscuits.

Take the weight of 8 eggs in sugar, 2 eggs in flour, and 6 eggs in rice-flour; or take 1 lb. of sugar, 4 ozs. of flour, 12 ozs. of rice-flour, and 8 eggs. Mix cold in the same manner as for Savoy Biscuits. Bake in a moderate oven in sponge frames nicely buttered.

# 121.—Scarborough Water Cakes.

8 eggs, 1 lb. of sugar, 2 lb. of flour, and a little ground cinnamon. Mix the same way as for Savoy Biscuits. Flavour with as much ground cinnamon as will make them pleasant to the taste. When taken off the paper put two together.

# 122.—Sponge Biscuit.

Take 12 eggs, 1 lb. 2 ozs. of sugar, 15 ozs. of flour. Mix cold the same as for Savoy Biscuits, which is the best method; or they may be mixed hot. The pans must be neatly buttered with creamed butter, and a dust of sugar thrown over them. Bake in a moderate oven, but not too hot. The bottoms should be a neat brown.

# 123.—Almond Sponge Biscuits.

Make exactly the same way as Sponge Biscuits, only have ready Jordan almonds blanched and each cut the long way into 6 or 8 pieces. Put them neatly on the top of each biscuit, dust sugar over them and bake as before.

# 124.—Naples Biscuits.

8 eggs, I lb. of sugar, I gill of water, I lb. 2 oz. of flour. A Naples Biscuit frame is about 8 ins. long, 3 ins. broad, and I in. deep. In this the partitions are upright, and must be papered neatly. Put the sugar and water into a small pan, let it dissolve and boil; then whisk the eggs. Pour in the sugar gently, and keep whisking until very light. When it is quite cold scatter in the flour, and mix it until smooth, stirring it as lightly as possible. Put it into the frames, well filled, and bake in a good oven, but not too hot. Dust them with sugar before putting in the oven.

# VII. PASTRY, CUSTARDS, ETC.

#### 125.—Butter for Puff Paste.

The butter must be perfectly sweet, and before it is used worked on a marble slab to make it smooth. Salt butter from cows fed on poor land makes the best puff paste, but it must first be washed in two or three waters. For every kind of cakes the butter cannot be too rich.

#### 126.—Puff Paste.

3 lbs. of butter and 3 lbs. of flour. The butter must be tough: if salt, wash it in two waters the night before using it. Take half of it and rub into the flour, and with pure water make into a paste the same stiffness as the butter. Roll it on a marble slab half an inch thick, spot it with small pieces of butter, dust it with flour; then double it up again, spot it as before, and roll it out again, spot it the third time, roll out again twice, and put in a cool place for half an hour with a cloth over it, when it will be fit for use.

Note.—Common puff paste for large pies may be made this way by using 1 lb. of butter and 2 lbs. of flour.

127. Another Way.—2 lbs. 8 ozs. of butter, and 3 lbs. 8 ozs. of flour. Mix the flour with water to the same stiffness as the butter, then roll out the paste, spot it with the butter. Roll it out three times, and dust it with flour as before. This paste is worse for lying, and should therefore be baked as soon as possible.

By using lard of a good tough quality, and mixing it as above, with the addition of a little salt, a good puff paste can be made suitable for wholesale purposes.

## . 128.—Crisp Tart Paste.

I lb. of butter, and 2 lbs. of flour. Rub the butter and flour very finely together, then mix it, with water, into a paste of the stiffness of the butter. This is a choice paste for tarts made of fresh fruit.

## 129.—Sweet Tart Paste.

6 ozs. of butter, 2 ozs. of sugar, 1 lb. of flour. Beat to a froth the whites of two eggs, rub the butter and flour very finely together, make the paste of the proper stiffness with whites of egg and a little water.

#### 130.—Paste for a Baked Custard.

8 oz. of butter and 1 lb. of flour. Boil the butter in a small teacupful of water, mix it into the flour, make it smooth, and raise it to any shape desired.

#### 131.—Paste for small Raised Pies.

12 ozs. of butter, 2 lbs. of flour, and 1 gill of water. Mix the same way as for baked custards.

#### 132.—To make a handsome Tartlet.

Take a large oval dish and sheet it with the best puff paste; cut it round the sides to make leaves, and fill it three-parts full with good preserved fruit. On the fruit put some device in cut paste, such as a large star, a sprig of flowers, or a tree.

#### 133.—Nelson Cake or Eccles Cake.

Take 2 lbs. of puff paste, roll out half of it, spread  $1\frac{1}{2}$  lb. of clean currants and  $\frac{1}{2}$  lb. of raw sugar upon it with a little

spice, and dash a little water on the sugar and currants to make them unite; then roll out the remainder of the paste and lay it on the top. Ice it well with whites of eggs and sugar. Bake on a square tin in a good oven.

#### 134.—To make a Custard.

Boil I pint of milk with a bit of cinnamon and a little fresh lemon-peel, then mix in a pint of cream and the yolks of 7 eggs well beaten. Sweeten to taste and let the whole simmer until of a proper thickness. It must not be allowed to boil. Stir it one way the whole time with a small whisk, until quite smooth, then stir in a glass of brandy.

#### 135.—Common Custard.

Beat up 3 eggs, add I gill of cream or new milk and a little sugar. Put a dust of cinnamon on each before putting in the oven.

# VIII. FRUIT CAKES, BRIDE CAKES, ETC.

## 136.—Directions for mixing Cakes made with Butter.

Take your butter and work it on a marble slab, then cream it in a warm earthenware pan, and be particularly careful not to let the butter oil; add the sugar and work it well with your hand, mixing in one or two eggs at a time, and so on progressing until all the eggs are used. Beat it well up, and as soon as you perceive the mixing rise in the pan put in the flour and beat it well. Then add the spices, currants, and whatever else is required for the mixing. You may then put it up into the tins you intend for it. It will be necessary during the time of creaming it to warm it two or three times, particularly in cold weather.

137. Another Way.—Proceed with the butter and sugar as before. Have ready separated the whites from the yolks of the eggs; mix in the yolks two or three at a time; let another person whisk up the whites stiff. Then put them to the other mixture and proceed as before directed.

#### 138.—London Way of mixing Cakes.

Weigh down the flour and sugar on a clean smooth table, make a hole in it, and bank it well up; in this hole put your eggs; cream the butter in an earthenware pan; then add to the flour and sugar the eggs and butter; mix all together and beat up well with both hands. You may work it up this way as light as a feather; then add the currants, spices, &c.

139. Another Way.—Take six pieces of cane about 18 inches long, tie them fast together at one end, but in order to make them open put in the middle, where you tie them, one or two pieces half the length. This is called a mixing-rod. Provide a tall pot, as upright as can be procured, which make hot; work your butter on a marble slab, then put it in the pan and work it well round with the rod until it is nicely creamed; put in the sugar and incorporate both together; add one or two eggs at a time, and so on progressively until they are all used up; work away with the rod with all speed, and as soon as it is properly light (which you may know by its rising in the pan) take it out and mix in the flour, spices, currants, &c., with a spatter. This is esteemed the very best way of mixing cakes.

#### 140.—Citron Cake.

I lb. of butter, I lb. 2 ozs. of sugar, 6 eggs, and 4 yolks; I lb. 4 ozs. of flour. Cut 4 ozs. of green citron in long thin pieces and place them in two or three layers as you put the cake up. It must be baked in a deep tin or rim papered with fine paper. Neatly buttered and baked in a slow oven.

#### 141.—Common Fruit Cake.

3 lbs. of butter, 2 lbs. of sugar, 24 eggs,  $5\frac{1}{4}$  lbs. of flour,  $4\frac{1}{2}$  lbs. of currants, 1 lb. 8 ozs. of lemon and orange peel, a little mace, a pint of warm milk,  $\frac{1}{4}$  oz. of soda, about  $\frac{1}{2}$  oz. cream of tartar. Proceed as directed.

#### 142.—Pound Cakes.

I lb. of butter, I lb. of sugar, 8 eggs, I lb. 2 ozs. of flour, I lb. 8 ozs. of currants, 8 ozs. of orange and lemon peel. Proceed as directed.

## 143.—Seed Cakes.

I lb. of butter, I lb. of sugar, 8 eggs, I lb. of flour, caraway

seeds. Some put I tablespoonful of brandy and 2 ozs. of cut almonds.

# 144.—Two and Three Pound Cakes.

2 lbs. 4 ozs. of butter, 2 lbs. of sugar, 16 eggs, 2 lbs. 6 ozs. of flour, 3 lbs. 8 ozs. of currants, 1 lb. 8 ozs. of orange, lemon, and citron; almonds and brandy if required; \(\frac{3}{4}\) oz. of cream of tartar and carbonate of soda. Proceed as directed.

#### 145.—Another Seed Cake.

2 lbs. 8 ozs. of butter, 2 lbs. of sugar, 16 eggs, 2 lbs. 4 ozs. of flour, 4 ozs. of cut almonds, caraway seeds, and a glass of brandy;  $\frac{3}{4}$  oz. of cream of tartar and carbonate of soda. Proceed as directed.

#### 146.—Four and Six Pound Cakes.

2 lbs. 8 ozs. of butter, 2 lbs. of sugar, 16 eggs, 3 lbs. 8 ozs. of flour, 6 lbs. of currants, 2 lbs. of orange and lemon, citron and almonds. Proceed as directed.

#### 147.—Bride Cakes.

The following mixtures are made in a few first-class shops, and the recipes for the same are not generally known. The prices quoted allow for almond-icing as well.

Ingredients.	10s.6d.	12S.	15s.	18s.	£1 1s.	£1 11s.	£2 2S.
Butter	0 11	7 Wine-	lb. oz. I I O IO I IO O 8 O 2 O O <sup>3</sup> <sub>4</sub> I I 9 Wine- glass- full.	2 0 0 10 0 3 — I 4 IO Wine-	I 6 I 0 2 8 O 12 O 3 O I I 6 I 2	I 2 O 4 O 1½ 2 I I8	O 2 2 12 24

<sup>\*</sup> Nutmegs, mace, and cinnamon.

## 148.—Icing Sugar for Bride Cakes, &c.

To make this take 2 lbs. of finely powdered icing sugar (first having an earthenware pan made warm), put in six fresh whites of eggs, and immediately whisk them, and as quickly as possible, until quite stiff; then add the sugar by degrees, whisking all the time. As soon as it appears light cease whisking, and beat it well with the spatter until you have put in all the sugar. A little tartaric acid or lemon-juice may be added towards the end of the mixing. To know when it is sufficiently beaten, take up a little on the spatter and let it drop into the basin again. If it keeps its shape it is ready; if it runs it is either beaten too little or requires more sugar.

A good substitute for eggs is French glue. Take a quarter of an ounce of it and fully one imperial pint of boiling water. Pour the water on the glue, and stir in with a spoon until all is dissolved. If convenient, make it two days before using. The glue is used similar to eggs. Add to it a small pinch of tartaric acid. This glue is mostly used for wholesale or cheap purposes.

#### 149.—Almond Icing for Bride Cakes.

whites of eggs and 2 yolks. Blanch and beat the almonds. Fine with whites of eggs, then add the sugar and whites and yolks, beat them well together and make them into a stiffish paste. As soon as the cake is baked, take it out and take off the hoop and the paper carefully from the sides, then put the almond icing carefully on the top of the cake, and make it as smooth as you can. Put into the oven, and let it remain until the almond icing is firm enough and of the colour of a macaroon; let it stand two or three hours, then ice it with sugar icing.

#### 150.—Wedding Cake.

 $1\frac{1}{4}$  lb. of flour, 1 lb. 2 oz. of butter, 1 lb. of moist sugar, 4 lbs. of currants,  $1\frac{1}{2}$  lb. of mixed peel, 2 nutmegs grated,  $\frac{1}{2}$  oz.

ground cinnamon, 10 eggs, ½ lb. blanched sweet almonds cut in halves, and a wineglassful of brandy. Mix as before directed.

#### 151.—Rich Twelfth Cake.

Same as wedding cake. In olden times a bean and a pea were introduced into the cake to determine who should be king and queen of the evening festivities.

#### 152.—Madeira Cakes.

13 lb. of butter, 2 lbs. of sugar, 2 lbs. of flour, 1 lb. of patent flour, 24 eggs. Proceed as before directed. This mixing makes eight cakes, selling at a shilling each. Put two thin slices of citron on each. Bake in a cool oven. Note.—Patent flour is made with 8 lbs. of flour, 4 ozs. cream of tartar, 2 ozs. carbonate of soda, and sifted three times.

#### 153.—Plum Cake. (As made for best shops in Edinburgh.)

3 lbs. of butter, 3 lbs. of sugar,  $4\frac{1}{2}$  lbs. of flour, 40 eggs, 8 or 10 lbs. of currants, 2 lbs. of peel, a few drops of essence of lemon. Cream and finish as before directed.

#### 154.—Genoa Cake.

1 lb. of butter, 1 lb. of sugar,  $1\frac{1}{4}$  lb. of flour, 1 lb. of eggs,  $2\frac{1}{2}$  lbs. of currants, washed and picked,  $1\frac{1}{2}$  lb. of orange peel. Bake in a small square-edged tin. Proceed as before directed. When nicely in the tin have prepared some blanched and chopped almonds, strew them rather thickly on the top, and bake in a moderate oven.

#### 155.—Rice Cake (Scotch Mixture).

2 lbs. of butter, 2 lbs. of sugar,  $2\frac{1}{4}$  lbs. of flour,  $\frac{1}{4}$  lb. of rice flour, 20 eggs, essence of lemon. Proceed as before directed.

#### 156.—Madeira Cake (Scotch Mixture).

 $1\frac{1}{4}$  lb. of butter,  $1\frac{3}{4}$  lb. of sugar,  $2\frac{1}{4}$  lbs. of flour, 20 eggs, a

small pinch of tartaric acid and carbonate of soda. Proceed as before directed.

#### 157.—Pond Cake or Dundee Cake.

I lb. of butter,  $1\frac{1}{4}$  lb. of sugar, 13 eggs,  $1\frac{3}{4}$  lb. of flour, 2 lbs. of peel cut in small squares. After it is creamed up and ready, entirely cover the top with small comfits. Bake in moderate oven. Do not cream it so light as for other cakes so as to keep the comfits from sinking in the cake.

#### 158.—Silver Cake.

I lb. of butter, I lb. of sugar, I pint of whites of eggs,  $1\frac{3}{4}$  lb. of flour, almond to flavour.

#### 159.—Gold Cake.

1½ lb. of butter, 1½ lb. of sugar, 1 pint of yolks of eggs, 1¾ lb. of sultana raisins, ½ lb. of lemon peel, 2 lbs. of flour, ½ lb. of patent or soda flour. Add a little milk to make it as soft as the Silver mixture, paper a deep square tin, and spread the gold mixture 2 inches thick, then spread the silver mixture nicely over the top of the gold. Baking, about  $2\frac{1}{4}$  hours.

#### 160.—Plum Cake at 6d. per lb. (As sold by Grocers.)

8 lbs. of flour, 2 lbs. of butter, 3 lbs. of sugar, 4 lbs. of currants,  $\frac{1}{2}$  lb. of peel, 15 eggs, 2 ozs. of carbonate of soda, 3 ozs. of cream of tartar, essence of lemon, and fresh churned milk, to make into a nice dough. Have some square one-pound tins nicely papered, and weigh in 1 lb. of the mixture. This is an excellent mixture if well got up.

- 161. Another Way.—I lb. of lard, 1½ lb. of sugar, 8 ozs. of peel, 5 lbs. of currants, 6 lbs. of flour, a grated nutmeg, 1 oz carbonate of soda, 2 ozs. cream of tartar, 8 eggs, the rest milk.
  - 162. Another Way.— $\frac{1}{2}$  lb. of butter,  $\frac{3}{4}$  lb. of sugar, 4 eggs,

3 lbs. of currants, 4 lbs. of flour,  $\frac{3}{4}$  oz. of carbonate of soda,  $\frac{1}{2}$  oz. of tartaric acid. Dough with milk.

## 163.—Mystery, or Cheap Plum Cake at 3d. per lb.

8 lbs. of common flour, 3 lbs. of brown sugar, 1 lb. of lard, 2 ozs. of peel, 3 lbs. of currants,  $1\frac{1}{2}$  oz. of spice, 2 ozs. of carbonate of soda, 1 oz. of tartaric acid. Dough with milk. Bake in a slow oven, wash with egg on top.

## 164.—Plum Cake at 4d. per lb.

4 lbs. of flour, 3 lbs. of currants, 12 ozs. of lard, 14 ozs. of sugar,  $1\frac{1}{2}$  oz. of cream of tartar, 1 oz. of carbonate of soda,  $\frac{1}{4}$  oz. of spice. Dough with good churned milk.

#### 165.—Lafayette Cakes.

 $\frac{1}{2}$  lb. of butter,  $\frac{1}{2}$  lb. of sugar,  $\frac{1}{2}$  lb. of flour, 6 eggs,  $\frac{1}{4}$  oz. of volatile salts in powder. Mix same as pound cake. Bake in round flat tins about  $\frac{1}{4}$  of an inch deep, or drop some of the paste on whity-brown paper and spread it out into a round thin cake about 6 inches in diameter. This will make 12 cakes. Bake them in a moderate oven in tins. Take them off the paper when baked, spread some raspberry or other jam on two of them and put three together. Trim them round the edges with a knife, and divide or cut them into 4, 6, or 8 parts according to the price at which they are to be sold.

#### 166.—American Genoa Cake.

Take 7 lbs. of common butter or butterine, 7 lbs. of castor sugar, 60 eggs, 12 lbs. of flour, 10 lbs. of currants, 3 lbs. of chopped peel, 1½ oz. of cream of tartar, ¾ oz. of soda, about 2 pints of churned milk. Cream the butter and sugar together, add the eggs, then mix all the other ingredients together. Paper a square-edged pan, lay on your batter about three inches thick, and bake in a sound oven. After the cake is baked, put it aside in a cool room till next morning, when you

may turn it out of the tin, and then, after taking the paper nicely off, cut it into suitable sizes.

Note.—The sides of the tin before being papered must be lined with wood upsets.

This cake is sold at 6d. per pound.

#### 167.—Lemon Cake.

 $\frac{3}{4}$  lb. of butter,  $\frac{3}{4}$  lb. of sugar, 1 lb. of eggs,  $\frac{1}{2}$  gill of brandy,  $\frac{1}{2}$  lb. of flour, the grated rind of two lemons. Cream the butter, sugar, and eggs, in the usual way, stir in the lemon rind, brandy, and flour; put in small moulds and bake in a moderate oven.

#### 168.—Bristol Cake.

2 lbs. of butter, 2 lbs. of sugar, 2 lbs. of eggs, 2 lbs. of flour, 1 lb. of patent flour, 3 lbs. of sultana raisins. Cream this cake in the usual way, bake in small round hoops, weighed out at 1 lb. each. Bake in moderate oven.

#### 169.—Jubilee Cakes.

 $4\frac{1}{2}$  lbs. of flour, 1 lb. 6 ozs. of butter, 1 lb. 14 ozs. of castor sugar, 11 eggs,  $1\frac{1}{4}$  oz. of carbonate of soda,  $1\frac{3}{4}$  oz. of cream of tartar, churned milk to dough. Weigh the flour, add the tartar and soda, make a bay; have the butter previously warmed, put it in the bay with the sugar, cream it well with your hand, adding the eggs gradually, then mix all together and make into a nice batter. Weigh at 1 lb. for sixpence.

This makes a number of cakes of various kinds—such as Citron Cake, by adding a small quantity of thinly chopped citron; Madeira Cake, by dusting the top with castor sugar, and placing two pieces of peel on the top; Plum Cake, by adding a few currants and cut peel; Cocoa-nut Cake, by adding a little cocoa-nut to the mixture, and dusting the top with cocoa-nut; and Seed Cake, by adding a few seeds. It is a capital mixture when nicely got up.

# IX. HANDY WHOLESALE RECIPES FOR SMALL MASTERS.

#### 170.—Soda Cakes or Scones.

of soda, 12 ozs. of lard, 2 ozs. of salt. Dough up with churned milk, mix the tartar and soda with the flour, rub the lard in the flour, make a bay, add the salt, and make into a nice dough with milk. Weigh off at 6 ozs. for a penny. Mould round, pin out the breadth of a small saucer, wash the top with milk, bake on the bottom of a good sound oven. Dock them with a docker.

#### 171.—Currant or Milk Scones.

6 lbs. of flour, 6 ozs. of lard, 6 ozs. of sugar, 3 ozs. of cream of tartar, 1½ oz. soda, 1 lb. of currants, 1 oz. of salt; buttermilk to dough. Mix as above. Weigh off at 11 ozs. for 2d., mould, pin out and cut in four; put on flat clean tins; wash with egg on top. Bake in a sound oven.

#### 172.—Sugar or White Spice Biscuits.

7 lbs. of good fine flour, 12 ozs. of lard, 3 lbs. of moist sugar, 4 ozs. of ammonia, churned milk to dough; mix as above, but do not work the mixture too much. Take about 4 lbs. of the dough, work it into a square or round shape, pin it out a little thicker than a pennypiece, cut out either in shapes or farthing or halfpenny biscuits, but well dock the sheet before you cut them.

Bake on greased tins; wash on top; a few currants strewn on the shapes. Bake in a sharp oven.

## 173.—Halfpenny Scotch Cakes.

3½ lbs. of flour, 12 ozs. of lard, 12 ozs. of sugar, ¼ oz. vol, and a little milk, as much as will dissolve the volatile salts and sugar. Mix as above, but well rub the dough; make it nice and easy to work off. Pin out a sheet about ¼ of an inch thick, cut out with a small round cutter; dock each one well; pinch round the edges with the finger and thumb. Bake on clean tins, but not greased, in a moderate oven.

#### 174.—Large Square Penny Albert Cake.

Rub 6 ozs. of lard in 6 lbs. of flour, then add 4 ozs. of cream of tartar and 2 ozs. of soda. Mix all together and make a bay. Put in the bay 2 lbs. of sugar and 3 lbs. of currants, and dough with churned milk, a little softer than for plum cake mixture. Have a large-edged pan cleaned and greased, put the mixture in the tin and spread it equally over the tin, putting your hand occasionally in a little milk to smooth over the surface. This mixture is best made up in a basin or large bowl and poured into the tin. Bake in a moderate oven and cut when cold.

#### 175.—Brandy Snaps.

Rub I lb. of lard in 4 lbs. of flour, put 4 lbs. of moist sugar on it and mix together; make a bay, put in 4 lbs. of syrup and about half a teaspoonful of essence of lemon. Make all into dough, pin it out, cut with a small round cutter, about the thickness of a penny. Bake on well-greased tins in a moderate oven. You can curl them round the peel or have them plain.

#### 176.—Nonpareil Biscuits.

Rub 6 ozs. of lard in 5 lbs. of flour, make a bay, put in 2½ lbs. of moist sugar, 2 ozs. of ammonia; dough with milk; make

into a dough, but do not work it too much. Cut out the same size and thickness as for brandy snaps; wash the top with milk; have some nonpareil sweets spread on the table, throw the biscuits on them, put on slightly greased tins. Bake in moderate oven.

## 177.—Common Halfpenny Queen Cake.

3 lbs. of flour, add 1 oz. of cream of tartar, 1 oz. of soda; mix; rub in 12 ozs. of lard, make a bay, put in 24 ozs. of castor sugar, essence of lemon; dough with churned milk; dough rather soft. Have some fluted tins ready greased, take a spoon and three-parts fill your tins. Bake in a moderate oven.

## 178.—Halfpenny Lunch Cake.

2 lbs. of flour, 4 ozs. of lard, 8 ozs. of sugar, 8 ozs. of currants, 1 oz. of soda, 1 oz. of cream of tartar; dough with churned milk and mix as for queens. Have some square sponge cake tins ready greased, take a spoon and three-parts fill them; wash with egg on top, dust them with castor sugar and bake in sound oven.

## 179.—Polkas or Halfpenny Sponges.

Put  $2\frac{1}{2}$  lbs. of good flour on the table, make a bay, put in 5 eggs,  $1\frac{1}{2}$  lb. of castor sugar, and 1 oz. voil; beat eggs, sugar, and ammonia with your hand for twelve or fifteen minutes, add a little churned milk, take in your flour and beat all well together with 12 drops of essence of lemon. Have your tins greased, take a spoon, half fill it with the mixture; put on tins about 2 inches apart; put about 6 or 8 currants on each and bake in a hot oven.

# IXA.—ADDITIONAL RECIPES.

#### 179a.—Maria Biscuits.

12 st. flour, 30 lbs. butter, 30 lbs. sugar, 6 lbs. coarse flour, 1 lb. volatile salts in powder, 3 ozs. carbonate of soda, 4 galls. milk. Dough as for other machine biscuits, and cut with the Maria biscuit cutter.

#### 179 b.—Osborne Biscuits.

10 st. flour, 20 lbs. butter, 30 lbs. sugar, 1 lb. carbonate of soda, 12 ozs. tartaric acid dissolved in a little water, 3 galls. and 1 quart of buttermilk. Dough and cut as for Maria biscuits above. Instead of 20 lbs. butter, 10 lbs. lard and 10 lbs. butter, with the addition of a little salt, will be found an improvement.

#### 179c.—Balmoral Biscuits.

20 st. flour, 30 lbs. butter and lard, 44 lbs. sugar,  $\frac{1}{2}$  lb. carbonate of soda, 8 lbs. golden syrup, 30 quarts milk. Dough as for the above.

#### 179d.—Social Biscuits.

20 st. flour, 12½ lbs. butter, 12½ lbs. lard, 48 lbs. moist sugar, 12 ozs. carbonate of soda, 10 ozs. volatile salts, 28 quarts milk, 4 ozs. salt powdered. Dough and cut as for above biscuits.

#### 179e.—Ginger Genoa Cake.

6 lbs. best Hungarian flour,  $3\frac{1}{2}$  lbs. castor sugar,  $3\frac{1}{2}$  lbs. confectioner's butter, 30 eggs, 2 ozs. ground ginger,  $\frac{3}{4}$  oz. cream of tartar, and half  $\frac{3}{4}$  oz. carboxate of soda, one 3 lbs. jar preserved ginger, and  $1\frac{1}{2}$  quarts of churned milk, with sufficient yolkine (or egg-colour) to give the cake a nice deep yellow tint.

Commence by lining an edged pan with wood upsets. The pan must be sufficient in size to hold 22 lbs. of the batter, or an ordinary sized pan can be used, and a movable upset placed in the pan and held at its required place by a square brick. Then line the inside of the pan and the sides of the upsets with a moderate stiff paper, and the pan is ready for the batter.

To prepare the batter, weigh the flour into a sieve, and add the cream of tartar and soda. Then sift all on to the table, make a bay in the flour, and place in the bay the sugar; slightly warm the butter, and add it to the sugar, and cream these two ingredients well down inside the bay. The eggs having been previously broken, should now be added about 5 or 6 at a time, and, after all is well creamed, put in the colour, and again cream; add the milk, and when the flour is half mixed in, draw in the preserved ginger, which should previously have been cut into small discs.

Finish off by mixing all into a nice batter, and spread it on the pan, making a flat surface  $2\frac{1}{2}$  inches thick. Bake in a moderate oven. Sold at 6d. per lb.

This cake, when well made, is a decided speciality.

## 179 f.—Halfpenny or Penny Sponge Cakes.

2 lbs. weight of eggs, 2 lbs. fine granulated sugar,  $1\frac{1}{2}$  lbs. sifted flour.

Where the sponge-beating machine is used, have your sugar nicely warmed, and whilst the warming process is completing, break the eggs into a half-gallon tin and pour them into the beating-machine. Now add the warmed sugar, and beat the batter for 15 or 20 minutes, or until the batter is ready, which you may know by the change in its colour and its rising to twice its original bulk in the machine. Now mix the flour lightly but thoroughly into the batter, and hand or spoon out

into "halfpenny" or "penny" cases. Bake in a good sound oven. Let the tins be nicely buttered with butter free from salt; and for greasing purposes, to each pound of butter allow 4 ozs. of fine flour. Mix the flour well through the butter, and place it in a pot ready for use.

Now weigh I lb. castor sugar and I2 ozs. fine flour; mix these two ingredients well together, and use for dusting the sponge-cake cases after they are greased, so as to allow the cakes, when baked, to leave the cases freely.

A machine is now invented for filling the cases, without help, from either spoon or hand.

## 179g.—Scotch Perkins.

2 lbs. medium oatmeal, I lb. syrup, I2 ozs. lard, I4 ozs. moist sugar,  $1\frac{1}{2}$  lbs. fine flour,  $1\frac{1}{2}$  ozs. carbonate soda,  $1\frac{1}{2}$  ozs. cream of tartar, 2 ozs. allspice, and I cupful of milk. Proceed as for Hovis biscuits (see No. 179l), making the dough about the same size.

Weigh them off at  $3\frac{1}{2}$  ozs. the pair, mould them round, and place them on slightly greased tins, just pressing them with the heel of the hand, and egg them over the top. Place these on an ordinary tin a little distance apart, as they will spread.

Sold at one halfpenny each. If care is taken with this mixture, the goods will give satisfaction. For variation, place half an almond on the top of each.

## 179 h.—Small Hunting Nuts.

 $3\frac{1}{2}$  lbs. Hungarian flour,  $\frac{1}{2}$  lb. butter,  $\mathbf{1}$  lb. 6 ozs. moist sugar,  $2\frac{1}{2}$  lbs. treacle,  $1\frac{1}{2}$  ozs. ginger,  $\frac{1}{2}$  lb. peel,  $\frac{1}{4}$  oz. acid,  $\frac{1}{4}$  oz. carbonate soda,  $\mathbf{1}$  wineglassful of water.

Sift the acid, soda, and flour; then rub the butter into the flour; and chop the peel into small pieces. Place all the ingredients in the bay, and make into a dough.

Roll out in sheets the thickness of a halfpenny, and cut with a small round cutter I inch in diameter. Place on greased tins. Wash them over the top with a wetted cloth the full size of the tin, slightly press the damped cloth with the flat of the hand, so that each nut is wet. Then bake in a moderate oven.

## 179i.—Slab Gingerbread.

12 lbs. fine flour, 7 lbs. treacle, 1 lb. lard, 1 lb. butter, 1½ lbs. moist sugar, 4½ ozs. carbonate of soda, 4 ozs. caraway seeds, 4 ozs. ground ginger, 6 eggs, 2 pints of churned milk.

Rub the butter and lard into the flour, and make a bay. Have the treacle previously warmed, and pour it into the bay. Dissolve the soda in a little of the milk; then add all the other ingredients. Make all into a moderate batter. Have an edged tin previously lined with wood upsets, and then lined all round with buttered paper. Spread the batter on the tin, and bake in a moderate oven. Sold at 6d. per lb.

## 179k.—Cassell Puddings.

 $\frac{1}{2}$  lb. butter,  $\frac{1}{2}$  lb. sugar,  $\frac{1}{2}$  lb. weight of eggs,  $\frac{1}{2}$  lb. flour.

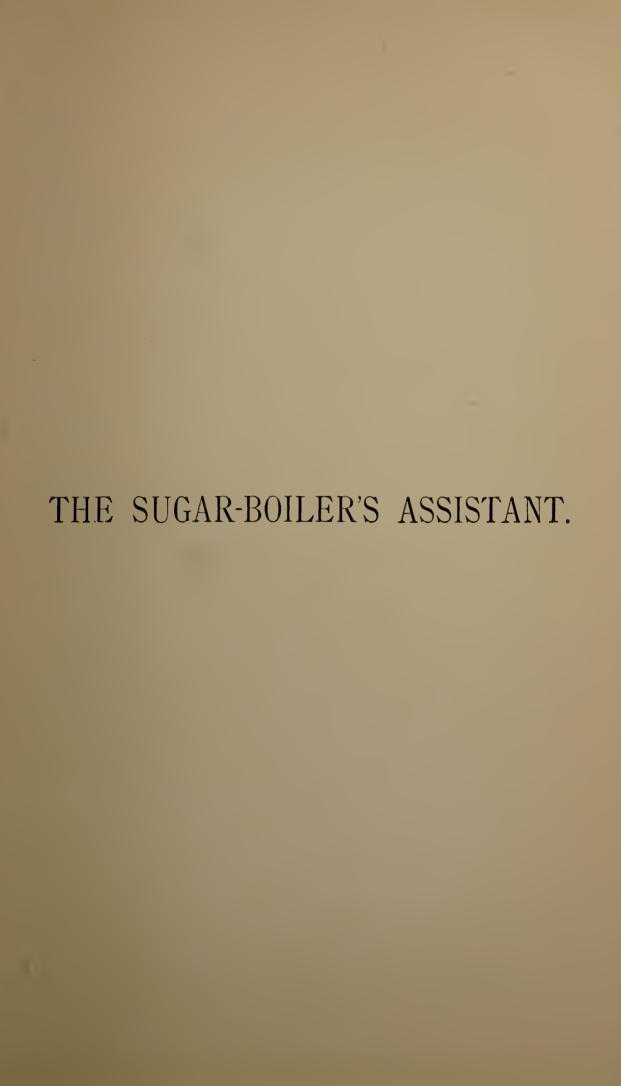
Cream the butter and sugar together, then add the eggs two at a time; and when well creamed, add the flour. Spoon them into lightly greased penny Madeira hoops.

The above quantity will make twenty-six at one penny each. When baked, ornament the top with a preserved cherry or a little pink sugar.

#### 1791.—Hovis Biscuits.

 $2\frac{1}{2}$  lbs. Hovis flour,  $\frac{1}{2}$  lb. butter,  $\frac{3}{4}$  lb. castor sugar, 2 eggs,  $\frac{1}{2}$  oz. carbonate of soda, 1 oz. cream of tartar.

Sift the soda and tartar through the flour. Now rub the butter into the flour. Add the eggs and sugar, and with a little milk make all into a dough. Pin out in sheets. Cut with a small round cutter. Bake in a moderate oven.





# THE SUGAR-BOILER'S ASSISTANT.

## X. CONFECTIONS IN SUGAR-BOILING.

## 180.—Clarifying Sugar.

The clarifying and boiling of sugar to the different degrees must be considered as the key to all sorts of stove working, and I will give here the method used for clarifying sugar. pan used must be perfectly clean and bright. Whisk two whites of eggs in one pint of water; break 30 lbs. of good lump sugar into small pieces and put it into the pan; pour over it 6 quarts of water, set it on a clear stove to melt, but be careful it does not blubber and boil before it is melted; when you see it rise it is then boiling, and must be stopped immediately by putting in I quart of water; when it rises again add the same quantity of water, and so on two or three times; this prevents the scum from boiling into the sugar and makes it rise to the top. Draw the pan to one side of the fire and take all the scum off; let it continue to simmer. Keep adding a little water to make the remaining part of the scum rise. By this time the scum will be very white and tough, which also take off if the sugar appear clear. Dip in your finger, and if a drop hang from it, it is of the first degree, called smooth, and may be put by for use.

You may clarify a much smaller quantity of sugar by carefully attending to these instructions.

## 181.—Testing Sugar.

Granulated sugar is considered the best to use, as it is less liable to adulteration than any other kind. Of moist sugars, Demerara is the best. The simplest way to test sugar for its purity is to dissolve a little in a glass of clear water. If the sugar be quite pure the water will only be slightly thickened, but not in the least clouded, neither will there be any sediment. In keeping sugar care should be taken to protect it from dampness and vermin—especially ants.

## To boil Sugar to the different degrees.

- 182. To the degree called "Pearled."—Cover your preserving pan bottom two or three inches deep, boil it briskly over a clear fire for a short time, then dip in your finger and put it to your thumb, if on separating them a small string of sugar adheres to each it is boiled to the degree called pearled.
- 183. To the degree called "Blown."—After you have ascertained that the sugar is boiled to the degree called pearled put in the skimmer and let it boil a few minutes, then shake it out of the sugar and give it a blow. If sugar fly from the skimmer in small bladders it is boiled to the degree called blown.
- 184. To the degree called "Feathered."—Continue to boil the sugar from blown for a short time longer; take out the skimmer and give it a jerk over the pan, then over your head, and if sugar fly out like feathers it is boiled to the degree called feathered.
- 185. To the "Ball" Degree.—To know when the "ball" has been acquired, first dip your finger into a basin of cold water, then apply your finger to the syrup, taking up a little on the tip and dipping it into the water again; if upon rolling

the sugar with the fingers and thumb you can make it into a small ball, that is what is termed the "small ball;" when you can make a larger and harder ball, which you could not bite without its sticking unpleasantly to the teeth, you may be satisfied that is the "large ball."

- 186. To the degree called "Crackled."—Boil the sugar from the degree called feathered a little longer; dip a stick or a piece of pipe (or your finger, if you are used to boiling) into water, then into the sugar and again into the water. If it crack with the touch it is boiled to the degree called crackled.
- 187. To the degree called "Caramelled."—Boil the sugar still further, dip a stick or your finger into water, then into the sugar, and again into the water. If it snap like glass it is of the highest degree, called caramelled, and must be taken off the fire immediately, for fear of burning. This sugar is proper to caramel any sort of fruit.

# 188 .- To boil Sugar by the Thermometer.

All the foregoing tests are according to the old style of boiling; but a boiling-glass can now be had which enables us to boil to a better degree of accuracy. Thus, to boil to the pearl is to boil to 220 degrees; the small thread 228 degrees; the large thread 236 degrees; the blow 240 degrees; the feather 242 degrees; the small ball 244 degrees; the large ball 250 degrees; the small crack 261 degrees; the hard crack 281 degrees; the caramel 360 degrees.

# 189.—Barley Sugar.

Put some sugar in a pan with water and place it on the fire to boil; when it is at the feather add a little lemon juice and continue boiling to the caramel; when done add a few drops of essence of lemon. Pour it on a marble slab previously oiled, cut into strips. When nearly cold take the strips in your fingers and twist them, and when quite cold put them into tin boxes and keep them closed down. The reason that barley sugar is so named is that it was originally made with a decoction of barley.

## 190.—Barley Sugar Drops.

These are made in the same manner as the preceding. You pour the sugar while hot into impressions made in dried icing sugar.

191.—Acid Drops.

Boil 3 lbs. of loaf sugar, I pint of water, and a teaspoonful of cream of tartar to the caramel; add a few drops of essence of lemon, and pour it on an oiled marble slab or stone; sprinkle on it a tablespoonful of powdered tartaric acid and work it in. Oil a tin sheet and put the sugar on it in a warm place, then cut off a small piece and roll it into a round pipe, cut this into small pieces the size of drops with a pair of scissors and roll them round under the hand; mix with fine powdered sugar, sift the drops from it and put them in boxes, to be used as required.

## 192.—Pine-apple Drops.

Cut the half of a pine-apple into slices, drop them into a mortar and pound them; put the pulp into a cloth and extract the juice; take as much sugar as will be required and boil it to the crack. When the sugar is at the feather commence to add the pine-apple juice; pour it on slowly, so that by the time the syrup is at the crack it shall all be mixed in with the sugar-Finish as for barley sugar drops.

# 193.—Poppy Drops.

Extract the essence of the poppies (the wild flowers are the best) in hot water, boil some sugar in a pan—the same way as for barley sugar drops—and add the decoction of poppies just

before the syrup is at the crack. No essence of lemon should be used, and they need not be sugared when put into boxes.

## 194.—Ginger Drops.

Make these after the same manner as barley sugar drops, in boiling the sugar, and flavour with a few drops of the essence of ginger just before the syrup is at the crack,

## 195.—Cayenne Drops.

These are made the same way as barley sugar drops and the poppy and ginger drops. Flavour a minute before the boiling sugar is at the crack. To give the cayenne flavour add a few drops of the essence of capsicum.

## 196.—Ginger Candy.

Boil some clarified sugar to the ball, and flavour with essence of ginger, then rub some of the sugar against the sides of the pan with a spatula until the sugar turns white; pour it into tins which have been oiled and put into the stove. The sugar should be coloured with some vegetable yellow whilst boiling.

#### 197.—Lemon Candy.

This is made in the same manner as ginger candy. Colour yellow with a little saffron, add a few drops of essence of lemon. This is made by boiling sugar to the feather and ball, and grained by rubbing against the pan.

#### 198.—Peppermint Candy,

The mode of making this candy is the same as that for making ginger candy, only add essence of peppermint.

#### 199.—Rose Candy.

Made the same way as ginger candy. Rose candy should be coloured with cochineal or carmine.

#### 200.—Burnt Almonds.

I lb. of almonds, 2 lbs. of sugar. Take 2 lbs. of clarified sugar and boil it to the "ball;" put I lb. of Jordan or Valencia almonds, blanched and dried, into the pan with the sugar; stir them from the fire, and let them absorb as much sugar as possible. If you want them well saturated with sugar repeat this until the sweetening is completed. Flavour with orange-flower water.

## 201.—Cast Sugar Drops.

Select the best refined sugar with a good grain, pound it and pass through a coarse hair sieve; sift again in a lawn sieve, to take out the finest part, as the sugar, when it is too fine, makes the drops heavy and compact and destroys their brilliancy and shining appearance. Now put the sugar into a pan and moisten it with any aromatic spirit you intend to use, using a little water to make it of such a consistence as to allow of its dropping off the spoon without sticking to it. Rose water is the best; it should be poured in slowly, stirring all the time with a wooden spoon. Colour the sugar with prepared cochineal or any other colour, ground fine and moistened with a little water; the tint should be light and delicate. Then take a small pan, made with a lip on the right side, so that when it is held in the left hand the drops may be detached from the Put in the paste and place the pan in the stove on a ring that just fits it. Take a small spatula and stir the sugar until it dissolves and makes a slight noise, but do not let it boil, but remove it from the fire when it is near the boiling point, then stir it well with the small spatula until of such a consistence that when dropped it will not spread too much, but retain a round form. Should it, however, be too thin add a little of the coarse powdered sugar, which should be reserved for the purpose, and make it of the thickness required. Take

a smooth tin or copper plate and let the paste drop on it from the lip of the pan at regular intervals. You hold the pan in the left hand and with a piece of straight wire in the right hand you separate the drop of sugar from the lip of the pan, letting it fall on the tin. In the course of an hour and a half or two hours the drops may be removed with a thin knife. If no copper plates are at hand a piece of stout cartridge paper will do. Damp the back of the paper with a sponge when you wish to remove the drops.

## 202.—Rose Drops.

These are made as in the preceding case. Flavour with essence of rose and colour with cochineal.

## 203.—Orange-flower Drops.

Flavour with orange-flower water or a little of the essence of neroli.

## 204.—Chocolate Drops.

2 ozs. of chocolate, 2 lbs. of sugar. The chocolate must be scraped to a powder and then made into a paste with cold water, finishing as for cast sugar drops.

#### 205.—Coffee Drops.

2 ozs. of coffee, 2 lbs. of sugar. Make a decoction of coffee in the regular manner and add it to your sugar to make the paste or syrup. Finish in the same way as for cast sugar drops.

#### 206.—Barberry Drops.

6 ozs. of barberries,  $1\frac{1}{2}$  lb. of sugar. Press the juice out of the barberries and mix it into the pounded sugar. Should there not be sufficient juice add a little clear water. Make no more paste than you can actually use, as the second time it is heated it becomes greasy and difficult to drop.

#### 207.—Peppermint Drops.

Moisten the sugar, which should be white and of the finest quality, with peppermint water, or flavour it with the essence of peppermint and moisten it with a little clear water. See that your utensils are very clean.

## 208.—Pine-apple Drops.

Take the pine-apple and rub the rind on a piece of rough sugar. The sugar thus impregnated you scrape off for use directly. Pound the pine-apple, and pass the pulp or juice through a fine hair sieve. Add the sugar just scraped off and as much more as you think it requires to make it sweet. Make it into a paste with clear water. Every precaution must be used, as it soon greases. No more should be made than you actually want for immediate use.

## 209.—Vanilla Drops.

2 pods of vanilla, I lb. of pounded sugar. Use the pods of vanilla in preference to the essence; the latter is apt to grease the paste. Cut the vanilla up very fine, put it in a mortar, and pound it well along with a portion of your sugar. When sufficiently smooth, sift it through a fine sieve. Finish as for the rest.

#### 210.—Ginger Drops.

Take as much ginger as you wish to use, pound, and sift it through a fine lawn sieve; add it to as much sugar as you desire to flavour, and mix it with clear water. Some use the ginger sold at the shops already powdered; some, again, the essence of ginger, colouring the paste with saffron.

#### 211.—Lemon Drops.

Rub off the yellow rind of some lemons on a piece of rough

sugar; scrape it off, and mix it into your paste. Add sufficient to your sugar to give it a good fiavour, and colour it a light yellow with saffron. Moisten with clear water, and mix as the rest.

## 212.—Orange Drops.

These are made the same as lemon drops.

#### 213.—Pear Drops.

Made the same as above, and flavoured with the essence of jargonel pear.

# 214.—Lavender, Violet, Musk, and Millefleur Drops.

These are all made the same way as the above, being flavoured with the essences that give them their names.

#### 215.—Pink Burnt Almonds.

Put I pint of clarified sugar in a round-bottomed pan on a clear fire, boil it to the degree called blown, mix in as much prepared cochineal as will make it a good colour, boil it again to the degree called blown, throw in the brown burnt almonds free from small; take the pan off the fire and stir the almonds well about in the sugar with the spatter until it is all upon them, which is very easily done if you are careful. You may repeat this two or three times, which will make the almonds very handsome.

## 216.—Philadelphia Caramels.

Take 10 lbs. of sugar, 2 quarts of rich cream,  $1\frac{1}{2}$  lb. of glucose, 1 lb. of fresh butter, 1 teaspoonful of cream of tartar, 1 lb. of cocoa paste, and  $\frac{1}{4}$  of a lb. of white wax of paraffin. Boil these to the "crack," pour upon a greased marble slab, between iron bars, and let it remain until cold, then cut it into small cubes and fold in wax-paper.

#### 217.—Boston Chips.

These are made of sugar boiled to the hard crack, flavoured and tinted to suit your fancy; it is then poured upon a greased marble slab. As soon as it becomes sufficiently cold the edges are turned in and the batch is folded in a mass, placed upon the candy hook and pulled; it is then run through a machine the iron rollers of which are set very closely together, so that the candy comes through as thin as a wafer; it is then cut into strips to suit, or it may be wound around an joiled round stick and then slipped off, making a curl. Two or more colours may be joined together before it is run through the machine, thus making a parti-coloured ribbon.

## 218.—Engagement Favours.

Break up I lb. of loaf sugar into small particles, let it dissolve in a pan with ½ pint of water and 2 spoonfuls of lemonjuice; skim and boil to the ball, add pieces of lemon peel tied together with a string, boil until a sample is brittle; take out the lemon peel, pour out the sugar on an oiled slab, taking care to distribute it so that the whole mass cools at the same time. It is pulled, manipulated, and cut in the ordinary way. A small part of the sugar coloured red and boiled separately may be used to variegate the sweets, and should be worked in just before cutting.

#### 219.—Almond Hardbake.

Oil a square or round tin with low edges, split some almonds in halves and place them in rows over the bottom with the split side downward until the surface is covered. Boil some raw sugar to the crack, pour it over them so as to cover the whole with a thin sheet of sugar.

Cocoanut cut in thin slices, currants, and other similar candies are made in the same way, except that the sugar is ground before it is poured over.

#### 220.—To make Gum Paste.

Put any quantity of picked gum dragon into an upright earthen jar, cover it over with cold water and let it stand two or three days. Have ready some of the very finest icing sugar, take the gum into a coarse piece of canvas and let another person assist in twisting it round until the whole has passed through. Beat it well up in the mortar to make it tough and white, then add sugar by degrees, still beating it with the pestle. When it is stiff take it out and keep it in an earthen jar for use. When it is worked into ornaments it will require a little starch-powder to smooth and make it proper for use. If you want to colour any part of it, use vegetable colouring.

## 221.—To spin a Silver Web.

Take I pint of clarified sugar and I teaspoonful of lemon juice, boil it in a small pan to the degree called caramelled; the moment the sugar is ready take it off and put the bottom of the pan in cold water. As soon as the water is warmed take the pan out. This precaution will keep the sugar from discolouring. As this sugar is to represent silver you must be particularly careful not to boil it too high. Have ready a crocanth mould neatly oiled with sweet oil, then take a teaspoon and dip the shank of it into the sugar on one side of the pan, take up a little sugar and throw the spoon backwards and forwards in the mould, leaving as fine a thread as possible. Continue to do so until the mould is quite full. You must observe that there be no blotches and that the threads be as fine as hair; you may then take it out and cover it over a custard or any other sweet, and may, if you please, raise it by spinning light threads of sugar on the top.

#### 222.-To spin a Gold Web.

Proceed with a gold web exactly the same as with the silver web, only boil the sugar a moment longer.

## 223.—A Spun Sugar Pyramid.

Provide four or five round moulds, the one larger than the other, oil them neatly, then boil your sugar as for silver web, only let it remain on the fire one minute longer, then take up sugar with the shank of the spoon and spin it as near the side of the mould as possible, but let no blotches appear; do this to the four moulds. As soon as cold take them out and fix one above another with hot sugar, then spin long lengths of sugar round until they form a complete pyramid. You may spin long threads of sugar to represent a feather, and place them on the top, or you may place a sprig of myrtle on the top and spin long lengths of sugar round it. The way to do it is to take the shank of your spoon, dip it into the cool sugar at the side of the pan, take hold of a bit of the sugar with your finger and thumb and pull it out to any length and fineness you please.

#### 224.—To spin a Gold Sugar Crocanth.

Boil your sugar a minute longer than for the silver web, using the same precaution as before. Have ready your mould neatly oiled, then take a little sugar on the shank of your spoon, spin it quite close to the side of your mould (be careful you make no blotches), spin all round, and strengthen the sugar as much as you can. There must be no holes or blotches, but an even regular sugar, all parts as near alike as possible. When the sugar is perfectly cold turn it out carefully, and set it over a custard or any other sweet. You may use it plain or ornament it with gum paste, as you think proper.

## 225.—To spin a Gold Cup.

Provide a copper mould like a cup. It must be made in three parts, and must be perfectly smooth within; oil each neatly, and spin sugar in each, agreeable to the directions for the crocanth. If two persons can spin at the same time it will be much better. When the three moulds are perfectly covered with sugar, and cold, take each out and put them together in a proper manner with hot sugar. You may ornament the cup with gum paste, which will make it very beautiful.

Note.—In boiling sugar to spin, great care must be taken to have a clear fire, and only to boil a small quantity at a time in a small brass pan. If you have two or three sugars to spin you must use two or three pans. One person may be attending to the boiling while another is spinning. A teaspoonful of lemon juice must be put to a pint of clarified sugar. If the sugar is likely to boil over the top of the pan drop one drop of sweet oil from your finger into the sugar, which will stop it immediately.

## 226.—A Spun Sugar Bee-hive.

Mould twenty or thirty bees in gum paste, as near the colour and shape as possible, make a hole with a pin on each side of the mouth and let them dry; make some of the wings extend as if flying. Provide a large round crocanth mould as near the shape of a bee-hive as possible, then boil the sugar as formerly instructed. Spin the sugar hot close to the inside of the mould. It must be regularly spun and very strong, the threads very fine, and no blotches. When it is so, let it stand until quite cold, then turn it out of the mould on to a large dish and ornament as under.

#### 227.—To Ornament a Bee-hive.

Before you begin to boil the sugar take as many borders out of your gum paste moulds as will go round the bottom; also take out leaves for the top; run a husk round the sides to represent the matting of the hive, lay your borders and leaves on a marble slab, with a cloth over them to keep them moist.

You may also twist a length of gum paste like a wreath and make it into a large ring; this must be dried; then fix on the ornaments with a little hot sugar and set the ring upright on the top. You may then spin long lengths of sugar very fine on to a tin plate. Take the bees and fix them with hot sugar on the top and sides of the hive; break the lengths of sugar in short pieces and fix them in the holes made in the bees. You may also form three entrances into the hive with the gum paste husk.

#### XI. COLOURING SUGAR.

# 228.—To prepare Sugar for Colouring.

Take good loaf sugar, get it ground well, put it through a hair sieve; what remains in the hair sieve put into a fine wire sieve and sift it, and the sugar which comes through the wire sieve will be rough sugar proper for colouring.

# 229.-To colour Sugar.

Divide the sugar into as many parts as you intend to colour, put each into a sheet of paper, then prepare your colours. Take a round-bottomed pan and put it on a warm stove, pour in your lot of sugar, stir it about with a dry whisk until the sugar is warm, add the colour, stir it well with the whisk to make the sugar all of that colour, then stir it about till the sugar is nearly dry, when you may spread it about on the sheet of paper. You may proceed in this manner with all the colours. The first colour used should be yellow, and the next green, which may be coloured in the yellow pan and with the same whisk. You must then wash both, and colour red, and after that orange. When the sugar is cold, sift it to take out any coupled, then bottle it separately. It will be found to be a useful article to ornament rout biscuits, creams, &c.

## 230.—Blue Colouring.

Take a fig of the best indigo, dip one side in warm water

and rub it on a marble slab until you gain the strength you want; or if you wish for a quantity, put a fig into a small cup, drop a tablespoonful of water upon it, and let it stand half an hour; then pour off the water at the top, and you will have a fine smooth colour.

## 231.—Carmine Colouring.

Take carmine, No. 24 or 40, 1 dr., liquor potassæ 2½ drs., water 2 ozs., glycerine sufficient to make 4 ozs. Rub the carmine to a paste with liquor potassæ and add the water and glycerine. This is a splendid red, and works well with liquor acids.

## 232.—Green Colouring.

Take some strong saffron colour and a little of the fine melted blue; mix them well together, which will make a green colour. If you want a pale green, use more yellow; if a dark green, use more blue.

233. Another Way.—Take a quantity of spinach, pick the leaves from the stalks, put them very tight down in a small pan, add a small quantity of water, cover them closely up, and set the pan on a warm stove for two hours; then turn the leaves into a coarse canvas, and let two persons twist it round until all the liquor is squeezed out; set it on a clear fire in a small pan, and let it boil one minute. When cold, bottle and cork it tight.

Note.—The vegetable colouring bought at shops which manufacture it specially for confectioners is the safest, cheapest, and best.

# 234.—Orange Colouring.

Take one tablespoonful of cochineal colour and the same quantity of the saffron liquor; mix them together and you will have an orange colour. If it be too red, add a little more yellow; if it be too yellow, add a little more red.

#### 235.—Red Colouring.

Beat 1 oz. of cochineal fine in a mortar, to which put  $1\frac{1}{2}$  pint of soft water and  $\frac{1}{2}$  oz. of cream of tartar; simmer them in a pan for half an hour over a slow fire. Take it off, and throw in  $\frac{1}{2}$  oz. of roach alum to strike the colour. You may ascertain the strength by dipping in a piece of writing paper. If not sufficiently strong, simmer it again for a short time. When nearly cold, strain it through a strong piece of canvas, and before you bottle it add 2 ozs. of double refined sugar

### 236.—Yellow Colouring.

Put the best saffron down tightly in a small jar, pour a little boiling water over it, cover it closely up, and set it in a warm place for half an hour, turning it two or three times in the water; then strain and bottle it for use.

#### XII. LOZENGES.

Lozenges are made of loaf sugar finely ground, gum arabic dissolved in water, also gum dragon. They are mixed together into a paste, cut round or oval with cutters, and dried. To make the best sort of lozenges, I lb. of gum arabic should be dissolved in I pint of water; but the proportion of gum and water in general use is  $2\frac{1}{2}$  lbs. of gum arabic in I quart and  $\frac{1}{2}$  pint of water, and I oz. of gum dragon in  $\frac{1}{2}$  pint of water.

#### 237.—Peppermint Lozenges.

Take some finely powdered loaf sugar, put it on a marble slab, make a bay in the centre, pour in some dissolved gum, and mix into a paste, flavour with the essence of peppermint, roll the paste on the marble slab until it is about an eighth of an inch thick. Use starch-powder to dust it with; this keeps it from sticking. Dust the surface with a little starch-powder and sugar, and rub it over with the palm of your hand. Cut out the lozenges and place them on wooden trays, and place them in the stove to dry. All lozenges are finished in the same way.

#### 238.—Rose Lozenges.

Make the paste the same way as the preceding, and use essence of roses to flavour with; colour the paste with eachineal.

#### 239.—Ginger Lozenges.

1 oz. of powdered ginger, 1 lb. of powdered sugar. Mix to a paste with dissolved gum; colour with yellow.

#### 240.—Transparent Mint Lozenges.

These are made with the coarser grains of powdered loaf sugar. Pass the sugar through a hair sieve, then sift it through a fine sieve to take away the powder. Flavour with peppermint. Finish as the others.

## 241.—Cinnamon Lozenges.

Mix as the others; flavour with cinnamon in powder, adding a few drops of essential oil. Colour with coffee colour.

#### 242.—Clove Lozenges.

r oz. of cloves powdered and  $2\frac{1}{2}$  lbs. of sugar. Mix, and finish as for the others.

#### 243.—Nutmeg Lozenges.

½ oz. of oil of nutmeg, 2 lbs. of sugar. Mix as instructions for the others.

### 244.—Lavender Lozenges.

Mix as for others; flavour with English oil of lavender, and colour with a little cochineal and blue mixed.

#### 245.—Vanilla Lozenges.

Use essence of vanilla or the stick pounded with sugar and sifted through a fine hair sieve.

#### 246.—Brilliants.

Take either of the pastes for lozenges and cut into small fancy devices or ornaments.

#### XIII. ICE CREAMS.

The genuine recipe for making ice creams will be found below. The first operation is the thorough scalding of the cream, sugar, and eggs: this gives it greater body and richness.

#### 247.—Vanilla Ice Cream.

Put into a perfectly bright and clean copper basin 2 lbs. of sugar, 4 eggs, I large fine bean of vanilla split and cut into small pieces, stir all well together with a large wire whisk, then add 4 quarts of rich cream, place it upon the fire and stir well and constantly until it is about to boil; then immediately remove it from the fire and strain it through a hair sieve into an earthen tureen or crock; let it stand till cool, pour it into your freezing-can already imbedded in broken ice and rock-salt, cover and turn the crank slowly and steadily until it can be turned no longer, open the can and remove the dasher, scrape the hardened cream from the sides with a long-handled spatula, and beat and work the cream until smooth. Close the can, draw off the water, and repack with fresh ice and salt and let it rest for an hour or two to harden and ripen.

Ice cream is often made from fresh unscalded cream beaten vigorously during the entire freezing process, this causes it to swell and increase in bulk from a fourth to a third, but what is gained in quantity is lost in quality, as it becomes very light and snowy in texture, having no body: it is simply a frozen froth.

Ice cream should be firm, smooth, and satiny, yet melting on the tongue like the best quality of gilt-edged butter.

In flavouring ice creams with fruit juices or the pulp thereof, the latter must never be cooked or scalded with the cream under any circumstances; they must be added, mixed, and beaten into the cream after it is frozen.

The process given above for vanilla ice cream is the same for all cream ices.

#### 248.—Bisque or Biscuit Glace.

Make a rich and highly flavoured vanilla ice cream and add for each quart \(\frac{1}{4}\) of a lb. of almond macaroons dried crisp and reduced to a powder in a stone mortar. After the cream is frozen, add and work into it the macaroon powder, and finish as above directed for vanilla ice cream.

#### 249.—Crushed Strawberry Ice Cream.

As for bisque, make a rich vanilla ice cream, and when it is well frozen add to it I pint of strawberries to each quart of cream. The berries must be full ripe and be crushed to a pulp with some fine sugar before adding and working them into the cream. Finish as for vanilla.

#### 250.—Hokey Pokey.

This article is not an ice cream proper, but a species of frozen custard made of milk, eggs, sugar, gelatine, and flavouring. Take 2 ozs. of gelatine, dissolve in  $\frac{1}{2}$  pint of milk or water, then to 4 quarts of milk and 8 eggs slightly beaten add  $1\frac{1}{2}$  lb. of sugar and the thin yellow rind of 2 lemons, and a pinch of salt; put the ingredients into a clean, bright basin, place on a moderate fire, and stir constantly till it begins to thicken, then remove quickly, and pour it into an earthen pan and continue to stir it till nearly cold, then add and stir in the

dissolved gelatine; pour all into your freezer and freeze as for other ices. When frozen it may be put in small boxes about three inches long by two inches wide, or it may be wrapped in wax paper and kept ready for sale in an ice cave. The office of the gelatine is to solidify the compound and assist its "keeping" qualities.

#### 251.—Cocoanut Ice.

Take grated white meat of 3 fine cocoanuts and the milk they have contained, to which add 3 quarts of filtered water; place on the fire and boil for ten minutes, then pour it into an earthen or stoneware crock, cover, and let it infuse till nearly cold, then strain and press off the liquid with a fine sieve; to this liquid add 1½ lb. of pulverised sugar and the whites of 3 eggs; mix all thoroughly well together and pour it into the freezer already imbedded in ice and salt. Freeze and finish as other ices.

#### XIV. PRESERVING FRUITS.

The preserving of fruits has always been considered a principal branch of confectionery, and one which requires no small degree of attention and diligence. As you are instructed in the boiling of sugars in its several degrees, named in each recipe, should it be boiled lower the fruit will lose its colour, turn windy, and spoil; if it is boiled higher it will rock and cannot be got out of the jars. Another important point is to preserve such fruit only as is quite fresh picked, the flavour, which is a very essential consideration, being lost if the fruit be stale. Cleanliness in this branch, as in every other, must not be neglected. Preserving pans, &c., must resemble a lookingglass as much as possible. Fruits well preserved will keep in almost any place. It is better, however, to keep them neither in too dry nor in too damp a place. The jars must be well protected from air by covering each with writing-paper dipped in brandy, covered and tied over with wet bladder.

Note.—A wood skimmer must be made of ash or elm about 4 inches long, 3 inches broad, and 1 inch thick. There is a handle fixed on one side, which take hold of and lay the wood gently on the fruit where the scum is, then take it off and scrape off the scum, and so on until all is taken off.

#### 252.—Large Strawberries.

Procure the largest Carolina or Hanoverian strawberries, pack two layers with care in a flat-bottomed preserving pan,

then pour over them I pint of currant juice, cover them with smooth clarified sugar, and over it a sheet of paper, set them on a warm part of the stove until the syrup is new-milk warm, then take them off; next morning take them out one at a time with an egg-spoon and lay them on a fine splinter sieve set over a pan to drain; add to the syrup a little clarified sugar and boil it to the degree called "pearled," put in the fruit with care and simmer them round; as soon as the syrup is off the degree called pearled, take them from the stove, skim, and put them with great care into a flat pudding pot, cover them up for two days, then lay them on a splinter sieve to drain, and add to the syrup I or 2 pints of clarified sugar as occasion may require, with the proportion of red currant juice, boil it to the degree called pearled, and put in your fruit with great care and simmer them very gently round the sides of the 'pan; as soon as the syrup is off the degree called pearled skim them and put them into jars, filling them within half an inch of the top. When cold cover them with writing-paper dipped in brandy and bladder them over.

#### 253.—Strawberry Jam.

Take any quantity of scarlet strawberries, pass them through a fine splinter sieve, add to them I or 2 pints of red currant juice, according to the quantity of strawberries, put the same weight of sifted loaf sugar as fruit, boil them over a bright fire, keep stirring all the time with a spatter, and with it make a figure of eight in the pan to prevent the jam taking hold of the bottom; when it has boiled ten minutes take it off and take a little jam out with a scraper, which drop upon a plate; if it retains the mark of the scraper it is of a proper consistency and ready to put into jars, but should it run thin on the plate it must be boiled again until of the substance above named. It is necessary here to observe that all sorts of red fruit should be

kept as short a time as possible on the fire, and for that reason let your fires be perfectly bright before you use them.

### 254.—Raspberry Jelly.

Take 4 quarts of clear raspberry juice, add to it 8 pounds of sifted lump sugar, set it on a clear fire in your preserving pan, stir it with the spatter to keep it from burning; let it rise, then take it from the fire, skim it, set it on the fire again, and let it rise three or four times, skimming it each time. If, on taking out the skimmer, small flakes hang from it, it is of a proper consistency and may be put into jars. When cold cover it with writing-paper dipped in brandy, and bladder them over.

#### 255.—Black Currant Jelly.

Pick black currants from the stalks as well and in as short a time as you can, then put them into strong earthen jars or stew pots, cover them well over and set them in a slow oven for one night; next morning put them into the jelly-bag, and as soon as drained, which will be in three or four hours, measure the juice. To each pint of juice take r lb. 4 ozs. of sifted loaf sugar, boil and skim it as before. You may if you think proper clarify the sugar, but this is a much easier way.

#### 256.—Red Currant Jam.

Pick red currants until you have 7 lbs., then force the whole of them through a splinter sieve, to which add 7 lbs. of sifted lump sugar; boil this very well over a brisk fire for twenty minutes, stirring it all the time with the spatter. This is very useful for tartlets, cheaper than rasps, and a much better colour. Put it into jars, cover them with paper dipped in brandy and bladder them over.

#### 257.—Apple Jelly.

Take codlin apples, cut them very thin across, fill your pre-

serving pan nearly full, cover them with soft water and then with a sheet of paper, set them on a slow fire, let them simmer slowly for a considerable time to extract the jelly from the apple. They must not on any account be stirred about in the pan. When the virtue appears to be quite extracted from them pour them into a jelly-bag. Cut more apples as before, about half the quantity, put them into the pan, and pour over them the extract from the first apples, simmer them very slowly as before. When the essence is all extracted put them into a jelly-bag. This jelly is used in the putting up of all preserved fruits.

#### 258.—Gooseberry Jam.

Take 7 lbs. of clean, picked, dry gooseberries, put them into your preserving pan with 1 pint of water and 7 lbs. of sifted loaf sugar. Boil over a clear fire from twenty minutes to half an hour; when they are boiled to the consistency required take them off, put them into jars and secure them from the air as the others.

#### 259.—Orange Marmalade.

Take 12 Seville and 12 China oranges, pare the outer skin off as thin as you can, lay it in soft water and freshen it every two hours to take out the bitterness, then pull off the white skin from the pared oranges and throw it away; cut them across, squeeze the juice from them, and set them on the fire in the preserving pan with plenty of soft water, boil them until so soft as to pulp through a hair sieve. Then boil the outer skin equally soft. If it will not go through, beat it well in a mortar and then put it through; add to it the other pulp and the juice. Weigh it, and to each pound allow 1 lb. 2 ozs. of sifted loaf sugar. Boil this well together, stirring it all the time, until it will retain the mark of the scraper, when it will be ready to put into jars, which must be secured from air as before.

#### XV. CHOCOLATE.

## 260.—General Directions for Making Chocolate.

Provide yourself with an iron pestle and mortar, also a stone slab of a very fine grain about two feet square, and a rollingpin of hard stone or iron. The stone must have an opening beneath in which to place a pot of burning charcoal to heat it. Warm the mortar and pestle by placing them on a stove, or charcoal may be used, until they are so hot that you can scarcely bear your hand against them. Wipe the mortar out clean, and put any convenient quantity of prepared nuts in it. which pound until they are reduced to an oily paste into which the pestle will sink with its own weight. Add fine powdered sugar to the chocolate paste. After it has been well pounded, the sugar must be in proportion of 3 lbs. to 4 lbs. of prepared cocoa. Continue to pound it until completely mixed; then put it in a pan and place it in the stove to keep warm. Take a portion of it and roll or grind it well on the stone slab with the roller, both being previously heated like the mortar until it is reduced to a smooth impalpable paste, which will melt in the mouth like butter when this is accomplished. Put it in another pan and keep it warm until the whole is similarly disposed of; then place it again on the stove, which must not be quite so warm as previously. Work it over again, and divide it into pieces of two, four, eight, or sixteen ounces each, which

you put in tin mould. Give it a shake, and the chocolate will become flat. When cold, it will easily turn out.

#### 261.—Chocolate Harlequin Pistachios.

In making harlequin pistachios, you warm some of the sweet chocolate by pounding it in a hot mortar. After it has been prepared in this manner, take some of it and wrap it round a blanched pistachio nut; roll it in the hand to give it the form of an olive, and throw it into nonpareils of mixed colours, so that it may be variously coloured, à la harlequin. Proceed with the remaining pistachio nuts after the same fashion, dropping them into the nonpareils so that the comfits will adhere to the pistachios. Fold them in coloured or fancy papers, with mottoes. The ends are generally fringed.

#### 262.—Chocolate Drops with Nonpareils.

Prepare some warm chocolate as in the preceding recipe. When the chocolate has been well pounded and is a smooth impalpable paste, make it into balls the size of a small marble by rolling in the hand. Place them on square sheets of paper about one inch apart; having filled the sheet, take it by the corners and lift it up and down, letting it touch the table each time: this will flatten them. Completely cover their surfaces with white nonpareils, gently shaking off the surplus ones. After the drops are cold, they can be very easily removed from the paper. The drops should be about the size of a sixpence.

#### 263.—Chocolate in Moulds.

It is usual now amongst confectioners to use the English unsweetened chocolate, as it saves much time and trouble, and is equally good. To form it into shapes you must have two kinds of moulds, made either of thick tin or copper tinned inside; the one sort is impressed with a device or figure, and

with a narrow edge; the other is flat or nearly so, and the same size as the previous mould, with a shallow device in the centre. You put a piece of prepared chocolate into the first mould, and then cover it with the flat one; upon pressing it down the chocolate receives the form of both devices. After it is cold it can be easily taken out. It should have a shining appearance.

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# INDEX.

PAGE	PAGE
A BERNETHY Biscuits 39	Boiling Sugar to the degree called
A —— As made in London 40 —— Usual way of mak-	"Ball" 78
Usual way of mak-	to the degree called
ing 40	"Crackled" 79
Acid Drops 80	to the degree called
Adulteration with Alum, Professor	"Caramelled" 79
Vaughan on 13	by the Thermometer 79
Albert Cakes 31, 69	Boston Chips 86
Almonds, Rock 52	——Lemon Crackers 41
Almond Fruit Biscuits 52	Brandy Snaps 35, 69
——— Hardbake 86	Bread, Tea Cakes, Buns, &c 17
——— Sponge Biscuits 56	—, Good, Essentials of 10
Alum in Bread 13	, Home-made 17
Liebig on Action of 13	Bread-making by the Old Method 17
Professor Vaughan on 13	—— Modern way of 18
American Genoa Cake 66	—— Process of 5
Apple Jelly ror	Scotch style of 19
Arrowroot Biscuits 42	Bride Cakes 62
Art of Bread-making, Slow Progress	——————————————————————————————————————
in 1	—— Icing Sugar for 63
	70 1111 1
	1 5 1 1 6 1
AKING, General Remarks on 10	Brown Bread compared with White 7
Balloon or Prussian Cakes 29	Buns, Recipes for 27, 28, 29, 30
Balmoral Cakes 29	
Biscuits 71	
Barberry Drops 83	
Barley Sugar 79	Butter for Pastry and Cakes 14
Drops 80	
Bath Buns 27	AKES made with Butter, Directions for Mixing 60 London way of Mixing 60
—— Oliver Biscuits 43	Directions for Mixing 60
Beehive, to Ornament a 89	London way of Mixing 60
—— in Spun Sugar 89	Captains' Biscuits 39
Biscuits, Fancy, Recipes for 45	Carmine Colouring for Sugar 92
Hard, Recipes for 38	Cassell Puddings 74
Bisque or Biscuit Glacé 97	Cast Sugar Drops 82
Blue Colouring for Sugar 91	Cayenne Drops 81
Boiling Sugar to the degree called	Chelsea Buns 28
"Pearled" 78	Chemistry as applied to Bread-mak-
to the degree called	ing 2,8
"Blown" 78	Chocolate, General Directions for
to the degree called	1
46 17 (1 , 1 ))	
reathered 78	Drops 83

108 INDEX.

PAGE	PAGE
Chocolate Drops with Nonpareils 104	German Wafers 49
——— Harlequin Pistachios 104	—— Yeast II
——— in Moulds 104	Ginger Cakes 33
Cinnamon Buns 30	——————————————————————————————————————
——— Lozenges 95	———— Drops 81, 84
Citron Cake 61	——— Genoa Cake 71
Clarifying Sugar 77	Lozenges 95
Clove Lozenges 95	Gingerbread, Queen's 32
Coarse Bread 22	——— German 32
Cocoanut Cakes 31	Grantham or White 34
—— Ice 98	——— Halfpenny Squares 35
Coffee Biscuits 42	——————————————————————————————————————
Drops 83	Scarborough 33
Colouring Sugar 91	Slab 74
Confections in Sugar Boiling 77	——— Spiced 32
Cracknel Biscuits 48	Gold Cake 65
Crimp or Honeycomb Biscuits 49	—— Cup 88
Crumpets 26	Sugar Crocanth 88
Currant Fruit Biscuits 47	—— Web 87
—— Jam, Red 101	Gooseberry Jam 102
—— Jelly, Black 101	Graham, Professor, on Brown Bread 8
—— or Milk Scones 68	Green Colouring for Sugar 92
Custard 59	Gum Paste 87
—— Common 59	
0 mmon 111 111 111 119	T ALFPENNY Lunch Cake 70
	ALFPENNY Lunch Cake 70 ————————————————————————————————————
IET Bread 21	Scotch Cakes 69
Digestive Biscuits 41, 42, 45	——— Sponges 70, 72
Drop Biscuits, Common 54	Hardbake, Almond 86
Dundee Cake 65	Hermit Biscuits 50
	Hokey Pokey 97
CCLES Cake 58	Honeycomb Biscuits 49
Edinburgh Biscuits 43	Hot-Cross Buns 28
Engagement Favours 86	Hovis Biscuits 74
Essentials of Good Bread-making 10	Hunting Nuts 36, 73
Exhibition Nuts 47	30,75
•	<b>▼</b> CE Creams 96
TERMENTATION 4	Tain m Co
Flour, Judging between Good	Imperial or Lemon Biscuits 45
170 1	2 important of Bomon Biscuits iii 45
T1 70 + +	T AGO, Professor, on Brown Bread 7
T 1 T 1	T
Fruit Biscuits 54 Fruit Cakes, Bride Cakes, &c.,	
Recipes for 60	
———— Cake, Common 61	Jumbles 35, 69
Fun Nuts 34	TENT Die it.
~ ENOA DICCINTO	ENT Biscuits 45
ENOA BISCUITS 47	17
Cake 64  with Ginger 71	A E A METTE C.1
with Ginger 71	T AFAYETTE Cakes 66
American 66	Laughing or Fun Nuts 34
Germ Flour Bread 23	Lavender Drops 85
Greman Buns 30	Lozenges 95

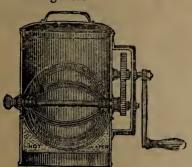
				GE		PA	GE
Lemon Biscuits	•••	•••	•••	45	Pastry, Custard, &c., Recipes for	• •	57
—— Cake	•••	•••	•••	67	Pear Drops	••	85
—— Candy	•••	•••	•••	8r	Penny Albert Cake, Large Square	••	69
—— Drops	•••	•••	•••	84			31
Liebig on Action of A				13	Rice Cakes	• •	31
Liebig on Process of		-maki	ng	5	——— Sponge Cakes	••	72
London Buns		•••	•••	30			81
Lord Mayor's Biscuits			•••	54	———Drops	••	84
Lozenges, Recipes for			•••	94		••	
Lunch Cake	•••	•••	•••	70	D 1 D1 1	••	
Luncheon Biscuits	•••		•••	41			
					TO 1 3.71	••	
A ACAROONS,	Comn	non	•••	50	Pineapple Drops		
	French	1	•••	-		••	
Macaroons,	Italian	l	•••	-	Plum Cake (as made for best shop		
Machine Biscuits	•••		43,		in Edinburgh)		64
——— made Biscuit				38	Plum Cake at 6d. per lb. (as sold b	у	
Madeira Cakes				64	Grocers)	••	65
——— Cake (Scotch				64	at 3d. per lb. (Mystery).	••	66
Making Bread, Moder				18	at 4d. per lb	••	66
Scotch				19	Polkas, or Halfpenny Sponges	• •	70
Maria Biscuits	_	•••			Pond Cake	••	65
Marmalade				102		••	_
Marseillaise Biscuits		•••	•••		Pound Cakes	5r,	62
Meringues		•••	•••		D 1 D	••	
Milk Scones		•••	•••	68	TO 1 TO 12	••	
Millefleur Drops		•••		85	TO 1 TO 1.	••	
Mixing Cakes, London			60,	_	D 1 0 1		
Muffins		•••		25	- m	••	
Musk Drops		•••		85			
Mystery Plum Cake		•••		66	UEEN Cakes	31,	70
212700017 2 1 1 1 1 1 1 1 1 1 1	•••	•••	•••		Queen's Bread	••	
APLES Biscuit Nelson Cake Nonparail Bis						••	
Noles Colo	S	•••	•••	50	Ziopo III III I	••	40
Nelson Cake		•••	•••	58	A CDDEDD W T-11-		
Nonparen Dis	cuits	•••	•••	09		1	
Nursery Biscuits	•••	•••	•••	44	Ratafias	••	
Nutmeg Lozenges	•••	•••	•••	95	THE TALL OF		- 0
- AMMEDIAN OIL				- 1		47,	
ATMEAL Cake		•••	•••	27	——— Cake (Scotch Mixture) . ———— Cakes	••	64
Orange Colour		Suga	r	92		••	31
—— Drops	; <b></b>	•••	•••	85		••	52
Orange Marmalade	•••	•••		102	7771 **	••	52
Orange-flower Drops	•••	•••	•••	83	• • • • • • • • • • • • • • • • • • • •	••	52
Osborne Biscuits	•••	•••	•••	71		••	81
						••	83
DALAIS-ROYAI		uits	•••	51	_	••	94
Parisian Barm		•••	•••	16		••	51
Parking Cake	•••	•••	•••	36	Rye Bread	••	22
Parkings		•••	•••	<b>3</b> 6			
Paste for Baked Cust		•••	•••	58	CAFFRON Buns	••	29
Small Raised	d Pies	•••	•••	58	Sally Luns	••	24
Tarts	***	111	111	58	Savoy Biscuits	12	54
							-

		PAGE		PAG
Scarborough Water Cakes	•••	56	Tea Cakes	2
Scones	•••	68	~~	2
Currant or Milk	•••	68	Technical Training, Need of	•••
Scotch Cakes	•••	69		7
—— Perkins	•••	73	1 Toulouse Discuite	4
Seed Cakes	•••	61, 62	Transporent Mint T	9
Shell Biscuits	•••	43	Tropolo D	3
Ship Biscuits	•••	38	for this Cinasal a	3
Shortbread, English	•••	••• 37	Trustfill Cales	6
———— French	•••	••• 37		
——— Scotch	•••	36	T T NFERMENTED or Di	et
Shrewsbury Biscuits	•••	46	70 1	:
Silver Cake	•••	65		
Silver Web	•••	87		
Snowdrop Biscuits	•••	••• 47	TANILLA Drops	8
Social Biscuits'	•••	7I	Lozenges	9
Soda Biscuits	•••	40, 44	——— Ice Cream	oʻ
Cakes	•••	68	Vaughan (Professor) on Adulteration	n
Spice Nuts	•••	34		I
Sponge Biscuits	•••	56		46
——— Cakes	•••	72	Victoria Biscuits	4:
Spun Sugar Beehive	•••	89	Violet Drops	85
——— Pyramid	•••	88		
Strawberry Ice Cream	•••	••• 97	T TALNUT Biscuits	48
Jam	•••	100	/ / XX = 3.3: C = 1	63
Strawberries, Preserving	•••	99		•• 34
Sugar Biscuits	•••	68	White Spice Biscuits	68
——Boiling	•••	78, 79	Whala Maal Door J. II	20
—— Clarifying	•••	77	for Master Bakers	., 21
Testing	•••	78	Wine Biscuits	40
to prepare for Colour	ing	••• 9I		
—— to Colour	•••	91	T 7EAST, American Recipe for .	
			German	12
ART Paste, Crisp		- "0	Yellow Colouring for Sugar.	11
Sweet	•••	50	Vork Risquits	93
Tartlet, a Handsome	•••		York Biscuits	•• 43
Lainet, a Hanusome	•••	58	Yorkshire Cakes	24

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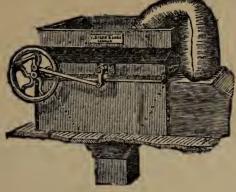
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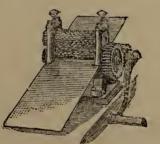
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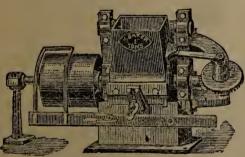
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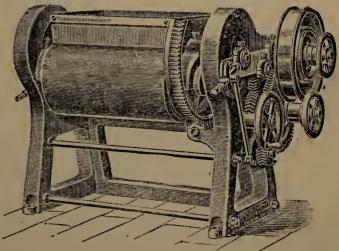
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